



DEPARTMENT OF THE NAVY

NAVAL SCHOOL OF MUSIC
1420 GATOR BLVD.
VIRGINIA BEACH, VA 23459-2617

NAVSOMINST 1540.1C
Code 20
19 Dec 18

NAVAL SCHOOL OF MUSIC INSTRUCTION 1540.1C

From: Commanding Officer, Naval School of Music

Subj: TESTING AND MEASUREMENT OF STUDENT ACHIEVEMENT

Ref: (a) NAVEDTRA 135 Series
(b) NAVEDTRA 130 Series
(c) NAVEDTRA 132 Series

Encl: (1) Basic Music Course Testing Plan
(2) Unit Leader Course Testing Plan
(3) Senior Musician Course Testing Plan
(4) Sound Reinforcement Technician Course Testing Plan

1. Purpose. To establish a command policy, assign responsibilities, and prescribe procedures for testing programs designed to measure student achievement in accordance with references (a) through (c). This instruction constitutes a complete rewrite and should be read in its entirety.

2. Cancellation. NAVSOMINST 1540.1B

3. Background. In order to ensure that students meet the requirements of the course objectives in the most efficient and effective manner, it is necessary to have a quality-testing program. Course Testing Plans will provide the specific details of administering and grading tests.

4. General.

a. Course Testing Plans address classroom academics, instrumental performance ability, labs, and additional performance testing.

b. All changes to the curricula and technical manuals will be carefully reviewed to determine if they affect any test. Any affected test will be revised as necessary.

c. There will be at least two versions of each test. This will allow for re-testing with a different version and test security by alternately administering or re-sequencing versions when two or more classes of the same course are in-house at the same time. When there are more than two classes in-house at the same time, three versions of the test will be utilized to ensure zero test repetition. Each version of the same test will differ from any other version by at least 20 percent (e.g., no version of any test will have more than 80 percent of the same test items). This requirement applies to all areas of a test.

d. There are no testing constraints that prohibit tests from being identical to the objectives they measure. All tests/test items applicable to performance and knowledge tests from all four courses shall reflect the objectives they measure.

e. Failed test items will be reviewed to correct student errors and/or to assist in remediation. This may be done one-on-one or in a group as appropriate. Precautions must be taken to prevent test compromise.

(1) For students who fail to meet the minimum standards for passing a test, a review of missed test items will generally provide sufficient remediation to correct errors and allow the students to progress.

(2) Retesting will occur if a student fails to meet the minimum standards for a test or any part of a test. At the end of a specified period, the student will be retested on the deficient material using a different test battery than what is given initially in the classroom. This period may be determined by the instructor, course manager, Division Head, or as a result of the Academic Review Board (ARB) process. The grade assigned after a retest, if passed, shall be equal to the minimum passing grade for the test.

f. All test banks will be reviewed and updated in accordance with references (a) through (c). The Training Department will incorporate this requirement into certification requirements for formal course reviews. Any test item needing correction will follow the same Quality Assurance (QA) review path as a new test item.

g. Test administration procedures/guidelines (proctor guides) will be developed in accordance with references (a) through (c). These guides will be developed for both knowledge and performance tests and will follow the same QA review path as test items.

5. Test Security.

a. All tests, including reports or other documents which contain test items or their answers, will be secure from compromise at all times.

b. All copies of tests (master, review, or administrative) will be afforded the same security.

c. The Academics Division will maintain a Test Security Log. There will be one log for each branch office and it will be stowed with the tests.

d. All knowledge tests will be stowed in the Academics Division office or other designated location. All performance testing materials will be stowed with each instrumental branch head and locked at all times. Safe storage is determined by the Training Officer (TO).

- e. Any staff member who picks up a knowledge test will ensure that each copy is numbered (e.g., 1 of 3) and dated.
- f. All previous review or administrative copies of tests will be destroyed when new copies are printed.
- g. Administrative copies of tests may be stowed between administrations or destroyed following administration at the discretion of the TO.
- h. Containers holding testing materials will be checked and locked by each Branch Head or his/her designee at the end of each working day.
- i. Division Heads will conduct quarterly spot checks to verify procedural compliance.

6. Quality Assurance.

a. General. Active QA and Test Analysis Programs are required to ensure that the tests are measuring student achievement. All new tests and test items will follow a QA review process as outlined below. The TO will implement the QA program and will monitor procedural compliance. The QA program is divided into three parts: test item review, test review, and test analysis.

b. Test Item Review. The Test Item Developer (normally the classroom/lab instructor) will produce new test items in accordance with references (b) and (c). The Developer will ensure the items are technically accurate in accordance with the appropriate technical manuals. All new test items will be reviewed by the Head of Academics Division, Head of Advanced Academics, and Head of Basic Academics.

c. Test Review. The TO will review new or significantly revised tests. A sample of tests will also be reviewed during the Formal Course Review.

d. Test Analysis.

(1) General. The use of item analysis, data construction, and maintenance of tests and test items can significantly improve the quality of the measurement of student achievement. After a test has been administered and scored it is desirable to evaluate the effectiveness of the items on the test. This process is achieved by an analysis of the student's response to each item. When formalized, the procedure is called Item Analysis.

(2) Test Item Analysis. Test Item Analysis will consist of Item Difficulty and Alternative Effectiveness data. In determining the characteristics of an item, a generous sample of test results is needed. At the MU "A" level, a minimum of one hundred answer sheets is felt necessary for a fair degree of confidence in the results. However, at the MU "C" level, due to

the small number of students assigned to each class, the information obtained from all answer sheets can be considered indicative and useful if the analyst remains aware of its limitations.

(a) **Item Difficulty** calculates the difficulty of the test item. If the item does not have the correct degree of difficulty, then it may not effectively discriminate. The acceptable range of difficulty for technical training is .50 to .90 per references (a) and (c). To calculate the difficulty index, take a complete sample and use the following guidelines:

1. Count the total number of correct answers (Nc) and divide by the total number taking the test (N).
2. Proportion is represented by a 'P'. The formula $P = Nc/N$ will result in a decimal that represents the **Item Difficulty**.
3. The larger the index, the easier the item. If everyone answered the item correctly, the index would be 1.00. If no one answered it correctly, the index would be 0.00. For 150 answer sheets, where 100 answers were correct, the difficulty index would be as follows:

$$P = 100/150$$
$$P = .66$$

(b) **The Effectiveness of the Alternatives** is used for multiple-choice test items.

1. The multiple-choice test item is only as good as its alternatives. If the incorrect alternatives are illogical, not plausible, or absurd, the student may be able to select the correct response without knowing the material.

2. The index calculates the number of students selecting each alternative within the high and low groups. The steps are as follows:

a. After sorting the answer sheets from highest to lowest, select the highest and lowest 27% of the students.

b. Count the number of students in each group that selected each alternative. For example:

<u>ITEM</u>	<u>(a)</u>	<u>(b)</u>	<u>(c)</u>	<u>(d)</u>	<u>Total</u>
High 27%	2	15	17	7	41
Low 27%	1	12	15	13	41

NOTE: When calculating **The Effectiveness of Alternatives** for courses with an annual throughput of less than 100, the above procedure may be modified for small throughputs. These courses may also use the 50 percent rule per reference (a). With this method, each test item that is missed by 50 percent of students is reviewed for possible problem areas.

c. Alternative "A" above may need to be improved. It is ineffective as an alternative since it was selected by only 3 of 82 students.

d. Alternative "C" is more deceiving to the high group than to the low group. This can be improved by making this response less plausible to the high group.

3. The Basic Academics' branch will compute these statistics on an annual basis for the Music Basic Course. The Advanced Academics' branch will record the data from all advanced course classes and will compute the statistics annually.

e. Test Analysis Review. The TO will review test item analysis during the Formal Course Review. Anytime that a division experiences a negative trend, the TO should be notified by memorandum.

7. Grades. All academic tests and performance assessments will be graded according to enclosures (1) through (4) as applicable.

8. Testing plans.

a. Testing plans are required by reference (a) on all courses.

b. Testing plans will be developed in accordance with references (a) and (c) and submitted to the TO before routing to the Course Curriculum Model Manager for final approval.

c. The TO will review applicable testing plans during the Formal Course Review.

9. Review Responsibility. The TO is responsible for the annual review and update of this instruction.


M. K. CORBLISS

Distribution: NAVSOMINST 5216.1
List I

TESTING PLAN FOR THE MUSIC BASIC COURSE

A-450-0010

December 2018

1. Incoming Diagnostic examinations based on foundational Music Theory and Ear Training (as they apply) will be administered to all students during the first seven days of the course. Incoming Instrumental Assessments will be administered to all students within seven to ten days of receiving their instrument. These examinations will be used to assess the incoming skill/knowledge levels of the student and generally will not delay the commencement of training.

2. All academic testing will be criterion-referenced unless otherwise indicated. Tests will be administered in accordance with the testing instructions to complete the test. There are no other testing constraints for academic portions of the curriculum. Performance testing will be administered according to the Course Master Schedule; however, if logistical support for the given test is not available on that specific day/time, it may be rescheduled to accommodate those support requirements. Instrumental performance proficiency assessments are computed on a 36-point scale and will be assigned the appropriate score using the conversion chart in NAVSOMINST 1300.1(Series). All grades and averages will be computed to a 4.0 system to calculate Grade Point Averages (GPA).

3. The minimum academic grade requirement for each graded coursework assignment chapter test and the final exam is 2.8 (70%) for Marine Corps and Navy students. Students who fail to meet minimum grade criteria will remediate to correct the deficiency and retest (normally within one week of the failed test). Any student who fails to pass a retest after remediation will receive an academic counseling and may be recommended for an Academic Review Board (ARB). Student's will retest as needed until a passing score is achieved and once passed, the grade recorded in the student's training jacket shall be equal to the minimum passing grade for that test.

4. Unit Grading Criteria

a. **Unit 1: Instrumental Performance**

(1) Instrumental performance enables the student to demonstrate the course objectives as a result of laboratory instruction and practical application of applied instrumental performance. All instrumental/vocal students must pass two Juries administered at specific intervals throughout the course as well as a Mid-Term and Final Assessment. Navy and Marine Corps students are graded on the same scale, but to different minimum standards based on operational requirements of their respective service.

(2) Formal Assessments enable the student to demonstrate skill development progress in a formal environment. If a student is unable to meet the minimum requirement for any Instrumental Performance Assessment, the grade assigned on a successful reassessment shall be equal to the minimum passing grade. Assessments will be administered as prescribed in NAVSOMINST 1300.1(Series) and will be graded by two qualified Instrumental Division instructors.

(3) Students are evaluated based on the following grading criteria for the Incoming, Mid-Term, and Final Assessments.

(a) Incoming Assessment is administered within seven to ten days from the date of receiving an instrument.

(b) Mid-Term Assessment is administered during week 11 of training. Minimum grade requirement for Navy students is a rubric score of 18 (2.70 on 4.0 grading scale). Minimum grade requirement for Marine Corps students is a Rubric score of 12 (2.50 on 4.0 grading scale).

(4) Incoming and Mid-Term Assessments will be evaluated based on the following performance requirements:

(a) Guitar, Bass, Piano, Brass, and Woodwinds (except Flute/Piccolo):

1. Prepared Material

2. Sight Reading

(b) Flute and Piccolo:

1. Flute Prepared Material

2. Flute Sight Reading

3. Piccolo Prepared Material

4. Piccolo Sight Reading

(c) Percussionists will be evaluated on Drum Set, Snare Drum, and Mallets:

1. Prepared Material

2. Sight Reading

3. Mallets, Major and Minor Scales: Pass/Fail

(d) Vocalist/Entertainer:

1. Prepared Material

2. Sight Reading

3. Major and Minor Scales: Pass/Fail

(5) Final Assessment is administered during week 21 of training.

(a) Minimum grade requirement for Navy students is a rubric score of 21 (2.85 on 4.0 grading scale).

(b) Minimum grade requirement for Marine Corps students is a Rubric score of 18 (2.7 on 4.0 grading scale).

(c) Guitar, Bass, Piano, Brass, and Woodwinds (except Flute/Piccolo):

1. Prepared Material
2. Quickly Prepared Material
3. Sight Reading

(d) Flute and Piccolo:

1. Flute Prepared Material
2. Flute Quickly Prepared Material
3. Flute Sight Reading
4. Piccolo Prepared Material
5. Piccolo Quickly Prepared Material
6. Piccolo Sight Reading

(e) Percussionists will be evaluated on Drum Set, Snare Drum, and Mallets:

1. Prepared Material
2. Quickly Prepared Material
3. Sight Reading

(f) Vocalist/Entertainer:

1. Prepared Material
2. Quickly Prepared Material
3. Sight Reading

(6) Jury One is a scheduled class recital administered by the instrument-specific branch head in week eight of training. This is a pass/fail evolution.

(a) Brass and Woodwinds will perform selections from the following list of ceremonial music:

1. Semper Fidelis
2. Bravura
3. CMTC (Citizen's Military Training Corps)
4. You're a Grand Old Flag
5. National Anthem
6. National Emblem (Trio)

(b) Percussionists will prepare a rudimental snare drum solo.

(c) Piano, Guitar, Bass, and Vocal students will perform a selection from their Mid-Term list of prepared pieces. Piano, Guitar, and Bass students will perform a blues song form in two of the five selected keys. Piano and Vocal students will also perform the National Anthem.

(d) Trumpeters will perform Bugle Calls. Bugle Calls will be randomly selected by an instructor during the Jury.

(7) Jury Two is a scheduled class recital administered by the instrument-specific branch head in week 18 of training. This is a pass/fail evolution.

(a) Brass and Woodwinds will perform selections from the following list of ceremonial music:

1. Honors
2. Officer of the Day
3. Anchors Aweigh
4. Marine's Hymn
5. Final Assessment excerpts

(b) Percussionists will prepare a mallet solo.

(c) Piano, Guitar, Bass, and Vocal students will perform a selection from their Final list of prepared pieces. Piano, Guitar, and Bass students will perform the Rhythm Changes song form in two selected keys. Piano and Vocal students will perform the National Anthem.

(d) Trumpeters will perform Bugle Calls. Bugle Calls will be randomly selected by an instructor during the Jury.

(e) Piccolo players will perform “Stars and Stripes Forever.”

(8) Instrumental lessons take place weekly with the exception of weeks when Assessments or Juries occur. Assessments and Juries supersede a weekly lesson.

b. Unit 2: Basic Music Theory

(1) Basic Music Theory enables the student to demonstrate the course objectives as a result of classroom instruction and practical application. Music theory curriculum is delivered in a blended learning environment combining instructor-based and computer-based training. Students will be tested on music theory via paper tests derived from the Learning Management System (LMS). Music theory chapters are grouped together numerically into lesson topics. Students are evaluated using chapter tests. Passing all chapter tests is a prerequisite for taking the final exam. See the Grade Weight Table below for a detailed breakdown of grading percentages.

(2) The following testing mechanisms apply:

(a) An instructor may administer a quiz at the instructor’s discretion; however, only tests that are part of the official testing plan count towards the student’s grade. Each chapter test receives a weight of 12.5%. When factoring in all six chapters, the aggregate is 75% of the overall unit grade. Failed tests are re-administered within one week of the failed attempt. Student’s will retest as needed until a passing score is achieved and once passed, the grade recorded in the student’s training jacket shall be equal to the minimum passing grade for that test. A failed retest on a chapter test will result in an academic counseling with the possibility of an ARB.

(b) The final exam is cumulative of all six chapters of music theory and receives 25% of the overall music theory grade. A failed final exam and failed retest will result in an academic counseling with the possibility of an ARB. Students must pass the final exam to graduate.

(c) Grade weights are computed as follows:

Chapter 1	12.5%
Chapter 2	12.5%
Chapter 3	12.5%
Chapter 4	12.5%
Chapter 5	12.5%
Chapter 6	12.5%
Final Exam	25%

c. Unit 3: Ear Training

(1) Ear Training enables the student to demonstrate course objectives as a result of classroom instruction and practical application of aural skills. Ear training exams are made up of performance examples and require specific grading protocols to ensure objectivity. The test administrator's guide details the protocols by lesson topic and exam. Dictation coursework will be assigned by the instructor and graded according to the instructor's guide by lesson topic and assignment.

(2) The following testing mechanisms apply:

(a) Quizzes can be administered by the instructor to measure the comprehension of assigned or recently taught material but will not be used in the final grade computation.

(b) Chapter tests are administered by the instructor at the end of each chapter to assess the student's comprehension of the objectives. Tests are comprised of two parts:

1. Pitch Performance

2. Rhythm Performance

(c) Each section of a test is scored individually. The rhythm and pitch portions will each be 50% of the grade for each chapter test. Any failed portion of the exam will be re-administered within one week of the initial failure after the student completes assigned remediation hours. Students will retest as needed until a passing score is achieved and once passed, the grade recorded in the student's training jacket shall be equal to the minimum passing grade for that portion of the exam. A failed chapter test and failed retest will result in an academic counseling with the possibility of an ARB. Chapter tests are 75% of the overall ear training grade.

(d) Dictation coursework will be assigned and graded by the instructor as pass/fail (P/F), with 70% or higher as a passing grade. If a student fails a coursework assignment, he/she will be assigned remediation hours in the LRC and must redo the assignment within one week of the initial failure. Failure of a second attempt of the assignment will result in an academic counseling with the possibility of an ARB.

(e) The final exam is a comprehensive performance test administered by the instructor to measure the student's retention of previously tested material and mastery of course objectives. The final exam will be 25% of the student's final grade. A failed final exam, or any failed part of the exam (i.e., rhythmic or melodic performance), will result in assigned remediation and will be re-administered within one week of the initial failure. A failed final exam (or portion thereof) and failed retest will result in an academic counseling with the possibility of an ARB. Students must pass the final exam to graduate.

(f) Students who score a 75% or higher on both sections of their incoming diagnostic test may be recommended for academic acceleration. In this case, a student will be given a timeline to complete every chapter test and the final exam on their own. Students who score an 85% or higher on both sections of their incoming diagnostic test may be recommended

for the Test-Out Program (TOP) where they will be given a deadline (no more than four training weeks from their TOP counseling) to take the final exam. Final grades for TOP students will be the grade received on their final exam.

(3) Grade weights are computed as follows:

Dictation Coursework...PASS/FAIL

Chapter 1.....25%

Chapter 2.....25%

Chapter 3.....25%

Final Exam....25%

d. Unit 4: Ensembles

(1) Ensembles enable the student to demonstrate the course objectives as a result of laboratory instruction and practical application of applied instrumental performance in varying settings. Students must pass three assessments administered periodically throughout the course. All assessments are graded on the same scale. Assessments take place during the regularly scheduled ensemble laboratory period. Failing an assessment and reassessment will result in an ARB. The grade assigned on any reassessment shall be the grade recorded in the student's training jacket, and if passed, shall be equal to the minimum passing grade for that assessment. Assessments are administered by a rehearsal division instructor or another qualified NAVSOM instructor.

(2) The following applies when assigning students to ensembles:

(a) All students will be assigned to Drill Band upon completion of Drill Band Indoctrination. In order to meet the occupational requirements of each service, required Drill Band instruction consists of one phase for Navy students and two phases for Marine Corps students. Both phases are performance-based, and every student will be assessed at the end of each phase. For both Navy and Marine Corps, the minimum passing grade on each assessment is 2.8.

(b) All students will be assigned to Concert Band and Small Ensembles. Small Ensembles consist of Chamber Groups, Brass Band, Ceremonial Band, and Popular Music Group. After completing Ensemble Indoctrination, students will be assigned to an appropriate ensemble based on their training timeline, requirements to graduate, and the availability of specific instrumentation to form ensembles. All students are required to complete four weeks of Concert Band and four weeks of a Small Ensemble.

(c) The Training Officer must approve any student needing to be removed from ensembles for instrumental or academic remediation.

(3) The following testing mechanisms apply:

(a) Drill Band assessments are administered at the end of each phase. The minimum passing score is 2.8. If failed, the student will retake the applicable phase.

(b) Concert Band assessments are administered at the end of the four-week training cycle. The minimum passing score is 2.8. If failed, the student will retake another four-week cycle.

(c) Small Ensembles assessments are performed at the end of the four-week training cycle or during a capstone performance. The minimum passing grade is 2.8. If failed, the student will retake another four-week cycle.

e. Unit 5: Improvisation

(1) Improvisation enables the student to demonstrate the course objectives as a result of laboratory instruction and practical application of applied instrumental performance in varying settings. All students must pass an assessment administered at the end of the unit. Grades will be assigned and graded by the instructor as pass/fail (P/F), with 70% or higher as a passing grade. Failing a reassessment may result in an ARB.

(2) Computation of unit grade is PASS/FAIL.

f. Computation of the Final Course Grade:

(1) Unit 1 Instrumental – 40%

(2) Unit 2 Theory – 20%

(3) Unit 3 Ear Training – 20%

(4) Unit 4 Ensembles – 20%

TESTING PLAN FOR THE UNIT LEADER COURSE

A-450-0012

December 2018

1. Incoming Diagnostic examinations based on foundational Music Theory and Ear Training (as they apply) will be administered to all students during the first two days of the course. These examinations will be used to assess the incoming skill/knowledge levels of the student and generally will not delay the commencement of training. Academic diagnostic scores that do not meet or exceed 2.0 will result in a documented counseling and may be grounds for an Academic Review Board (ARB). All Unit Leader Course students will take an incoming, mid-term, and final instrumental/vocal assessment; furthermore, to improve instrumental performance ability, all students are required to take weekly one-on-one instrumental/vocal lessons throughout the entire length of the course.
2. All academic testing will be criterion-referenced unless otherwise indicated. Tests will be administered to the entire class at one time and students will be allotted one full class period to complete tests. There are no other testing constraints for academic portions of the curriculum. Performance testing will be administered according to the Course Master Schedule; however, if logistical support for the given test is not available on that specific day/time, it may be rescheduled to accommodate those support requirements. All grades and averages will be computed to a 4.0 system to calculate Grade Point Averages (GPA).
3. The minimum passing score for all knowledge testing and coursework will be 3.0. The minimum passing score for skill performance testing will be on a graduated scale per unit topic requirements. The minimum grade for graduation is a passing score for all academic and applied skill areas. Students who fail to meet the minimum criteria for a test will be assigned individualized remediation to correct the deficiency. Students who fail to achieve an overall passing grade for any unit, fail any retake of a performance test, or fail to maintain the normal progression in training will be referred to an ARB. Students granted a probation period following an ARB will complete a program of remediation and retesting of deficient areas as determined by the ARB process. The grade assigned on a retest, if passed, will be the minimum passing grade for that test.

4. Unit 1: Conducting

- a. Conducting enables the student to demonstrate the course objectives and provides a practical means of assessing the student's ability to conduct a ceremonial band through written and performance evaluation. This unit will also include ceremonial band score study, ceremonial programming, and ceremonial band rehearsal techniques. Classroom examinations are multiple-choice and norm-referenced. Assigned musical selections will be performed for and graded by a two-member board of qualified Naval School of Music (NAVSOM) staff members. Minimum

completion of each board is required prior to testing the subsequent unit. Applied conducting boards will contain the following elements and associated minimum passing grades:

- (1) Board 1: Basic Fundamentals - Pass/Fail
- (2) Board 2: Marches/Rehearsal Techniques - 3.0
- (3) Board 3: Seated Ceremonial Band/Pouch Concert - 3.0
- (4) Board 4: Ceremonial Performance - 3.0

b. Computation of the unit grade:

- (1) Classroom Participation - 20%
- (2) Lesson Topic Exams - 20%
- (3) Average of Boards 2 through 4 - 60%

5. Unit 2: Music Theory

a. Music Theory enables the student to demonstrate the course objectives as a result of classroom instruction and practical application.

b. Coursework is assigned according to the block of instruction being taught. The coursework average is compiled by averaging all assignments by lesson topic and then averaging all lesson topic coursework grades for the coursework average. Error deductions are computed by raw score average with zero errors resulting in a 4.0.

c. Lesson topic exams consist of a combination of questions to include multiple-choice, true or false, matching, and practical application. Lesson topic exams are averaged together for the unit exam grade.

d. A comprehensive final exam comprised of questions to include multiple-choice, true or false, matching, and practical application are graded in the same way as lesson topic exams and will be given at the completion of the unit.

e. Computation of the unit grade:

- (1) Coursework/Progress Tests: 10%
- (2) Lesson Topic Exams: 50%

(3) Final Exam: 40%

6. Unit 3: Ear Training

a. Ear Training enables the student to demonstrate the course objectives as a result of classroom instruction and practical application on concepts of increased aural understanding and ability. Tests are performance and dictation oriented in nature, which require specific guidelines for grading in order to ensure that subjectivity is minimized. The instructors possess a detailed outline of the guidelines (by lesson topic) as a part of the test administrator's guide.

b. Chapters 1 through 4 of the Ear Training Manual are reviewed to refresh the student's memory of prior Music Basic Course Ear Training performance and dictation procedures. Chapters 5 and 6 are trained and tested to ensure students are prepared for advanced melodies contained in chapters 7 and 8.

c. Performance Exams. Students begin these combination exams with a grade of 4.0. Various increments are deducted from their grade for each error made. Exams contain melodies, simple intervals, root position/inverted triads, and root position/inverted four-note chords. For melodic/rhythm performances, each beat is graded separately for both melody and rhythm so a four bar example in 4/4 time would have 32 possible errors. The increment for each error made is determined by dividing four by the total number of possible errors. The determined increment is multiplied by the total number of errors, and then subtracted from 4.0, resulting in the student's performance average for each chapter. For example, if a student made five errors on an exam with 100 possible deductions, four would be divided by 100 = .04 (increment) x 5 (errors) = .2 (total deduction) and $4 - .2 = 3.8$ as an exam score. Performance exams from all chapters are averaged together for the unit performance average.

d. Dictation Exams. As the instructor administers aural dictation, students are required to transcribe the musical elements contained therein. These exams are scored on a 4.0 scale, and each example is graded separately. Exams contain melodies, simple intervals, root position/inverted triads, and root position/inverted four-note chords. For melodic examples, rhythm and pitch errors for each example are deducted separately per the unit of beat. For example, a melody in 3/4 with four measures, contains 24 possible deductions (12 for rhythm/12 for pitches). Chord progression dictation will be graded per chord given. All students begin with a grade of 4.0. Various increments based on the total number of possible points are deducted from the student's grade for each error made. The increment is determined by dividing 4.0 by the total number of possible points on the exam. Dictation tests are averaged together for the unit dictation average.

e. Transcription Project. This project is used as a practical application for all materials presented in the unit. Each student will choose a contemporary musical selection that meets the assigned criteria, and must be approved by the instructor. The student then transcribes the

selection into a score format. Errors are deducted upon the half-measure for each instrument used in the score.

f. Final Examination. The final exam consists of performance and dictation of melodies, simple intervals, inverted triads, inverted four-note chords, and chord progressions. Contemporary music transcriptions will then be performed by a Popular Music Group (PMG) as a Capstone event.

g. Computation of the unit grade:

- (1) Coursework: 10%
- (2) Progress Tests: 10%
- (3) Performance Tests: 30%
- (4) Dictation Tests: 30%
- (5) Transcription Project: 10%
- (6) Final Exam: 10%

7. Unit 4: Contemporary Ensemble Rehearsal Techniques (CERT)

a. CERT enables the student to demonstrate the course objectives and provides a practical means of assessing the student's ability to direct an ensemble through written and performance evaluation. Classroom examinations consist of multiple-choice questions and are norm-referenced. CERT assessment boards will be performed for and graded by a three-member board of qualified NAVSOM staff members. Successful completion of each board is required prior to testing the next/subsequent level of the unit. Boards 1, 2, and 4 are PASS/FAIL. Board 3 requires a minimum score of 3.0 to pass and will be the only board score used for computation of the unit grade. Applied rehearsal boards will contain the following elements and associated minimum passing grades:

- (1) Board 1: 1-Horn w/Rhythm Section: P/F
- (2) Board 2: Chamber Ensemble (Brass/Woodwind): P/F
- (3) Board 3: Contemporary Brass Band: 3.0
- (4) Board 4: Popular Music Group (Rock Band, Horns, Vocalist): P/F

b. Computation of the unit grade:

(1) Classroom Lesson Topic Exams: 20%

(2) Board 3: 80%

8. Unit 5: Form and Analysis

a. Form and Analysis/Contemporary Score Study enables the student to demonstrate the course objectives as a result of classroom instruction and practical application.

b. Coursework is assigned according to the block of instruction being taught. The coursework grade is compiled by averaging all assignments with lesson topic coursework. Error deductions are computed by raw score average with zero errors scoring a 4.0.

c. The lesson topic exam is a knowledge-based exam. The multiple-choice portion is norm-referenced and comprises 100% of the exam grade. This exam becomes the unit exam grade.

d. Computation of the unit grade:

(1) Coursework/Quizzes: 30%

(2) Lesson Topic Exam: 70%

9. Unit 6: Contemporary Band Scoring

a. Contemporary Band Scoring enables the student to demonstrate the course objectives and provides a practical means of assessing the student's ability to critically analyze instrumental voicings within a contemporary ensemble arrangement and write basic contemporary arrangements. Grading procedures are as follows:

b. Coursework is assigned according to the block of instruction being taught. The coursework average is compiled by averaging all assignments by lesson topic and then averaging all lesson topic coursework averages for the unit coursework average. Error deductions are computed by raw score average with zero errors scoring a 4.0.

c. The course project average is based upon the combined average of three projects: a four-horn jazz combo arrangement, a six-horn brass band arrangement, and a concert band with soloist reduction. Projects are graded using the arranging evaluation rubric and will be performed for and graded by a three-member board of qualified NAVSOM staff members.

d. Computation of the unit grade:

(1) Coursework/Progress Tests: 30%

(2) Project Grades: 70%

10. Unit 7: Ceremonial Band Scoring

a. Ceremonial Band Scoring enables the student to demonstrate the course objectives and provides a practical means of assessing the student's ability to critically analyze instrumental voicings within a ceremonial band arrangement and write a basic ceremonial band arrangement.

b. Coursework is assigned according to the block of instruction being taught. The coursework average is compiled by averaging all assignments by lesson topic and then averaging all lesson topic coursework grades for the final coursework average. Error deductions are computed by raw score average with zero errors scoring a 4.0.

c. The project is graded using the arranging evaluation rubric and will be performed for and graded by a three-member board of qualified NAVSOM staff members.

d. Computation of the unit grade:

(1) Coursework/Progress Tests: 30%

(2) Project: 70%

11. Unit 8: Drum Majoring

a. Drum Majoring enables the student to demonstrate the course objectives and provides a practical means of assessing the student's ability to lead a marching band using a mace. Classroom examinations are multiple-choice questions and are norm-referenced. Applied progress tests are development performance checks administered in a laboratory setting and according to the respective job sheet(s).

b. Examinations are comprised of multiple-choice and application-type questions and are norm-referenced. Classroom lesson topic exams are averaged together for the unit lesson topic examination average. Boards will be performed for and graded by a three-member board of qualified NAVSOM staff members. Successful completion of each board is required prior to testing the next/subsequent level of the unit, and both boards will be equally weighted to determine that portion of the grade. Applied rehearsal boards will contain the following elements and associated minimum passing grades:

(1) Board 1 - Concert Split/Sound Off: 3.0

(2) Board 2 - Pass-in-Review: 3.0

c. Computation of the unit grade:

(1) Classroom Lesson Topic Exams: 20%

(2) Performance Boards: 80%

12. Unit 9: Introduction to Melodic Writing

a. Introduction to Melodic Writing enables the student to demonstrate the course objectives as a result of classroom instruction and practical application of basic compositional and melodic development techniques.

b. Lesson topic exams are multiple-choice questions and/or practical application. The multiple-choice tests are norm-referenced. The student will analyze transcribed jazz solos and identify characteristic jazz melodic devices and melodic development techniques. Students will also write melodic lines over standard chord progressions using characteristic melodic vocabulary and melodic development techniques. Each student is tested on the knowledge and application of each element presented in the lesson topic.

c. Computation of the unit grade:

(1) Coursework: 50%

(2) Final Written Exam: 50%

13. Unit 10: Unit Logistics and Library Management

a. Introduction to Unit Logistics and Library Management enables the student to demonstrate the course objectives as a result of classroom instruction, projects, and become familiarized with the policies and procedures that govern the Navy and Marine Corps Music Programs.

b. Method of computing Unit Logistics grade:

(1) Coursework: 10%

(2) Final Exam: 90%

c. Method of computing Library Management grade:

(1) Final Exam: 100%

d. Computation of the unit grade:

(1) Unit Logistics: 50%

(2) Library Management: 50%

14. **Unit 11: Audition Standards**

a. Audition Standards enables the student to demonstrate the course objectives as a result of classroom instruction and practical application of the curriculum.

b. Students are given detailed classroom instruction on the idiosyncrasies of musical instruments as they apply to the audition process for Navy and Marine Corps Music Programs. The students observe mock auditions directed by a qualified instrumental instructor and compare grades for consistency.

c. The unit grade is PASS/FAIL.

15. **Unit 12: Instrumental Performance**

a. Instrumental Performance enables the student to demonstrate the course objectives as a result of private instruction and ensemble performance. Grades will be assigned in accordance with assessment procedures contained in NAVSOMINST 1300.1(Series).

b. Formal Assessments enable the student to demonstrate skill development progress in a formal environment. If a student is unable to meet the minimum requirement for any instrumental/vocal performance assessment, the grade assigned on a successful reassessment shall be equal to the minimum passing grade. Assessments will be administered as prescribed in NAVSOMINST 1300.1(Series) and according to the following framework:

(1) Incoming Assessment is administered during the 1st week of instruction.

(2) Mid-Term Assessment is administered during the 15th week of instruction.

(3) Final Assessment is administered during the 30th week of instruction.

(a) Minimum grade requirement for Navy students is 24.

(b) Minimum grade requirement for USMC Sergeant is 22.

(c) Minimum grade requirement for USMC Staff Sergeant and above is 24.

(d) All Unit Leader Course students will take instrumental/vocal lessons for the entire duration of the course. Weekly private lessons enable the students to receive one-on-one instruction designed specifically to assist in the development of individual performance skills. These lessons will be graded as either SAT or UNSAT based upon the student's progression toward the instrumental performance final grade requirement.

c. Computation of the unit grade:

(a) Final Assessment: 100%

16. Computation of the Final Course Grade:

a. Conducting: 15%

b. Music Theory: 7.5%

c. Ear Training: 10%

d. CERT: 15%

e. Form and Analysis: 2.5%

f. Contemporary Band Scoring: 10%

g. Ceremonial Band Scoring: 5%

h. Drum Majoring: 15%

i. Introduction to Melodic Writing: 2.5%

j. Unit Logistics: 2.5%

k. Instrumental Performance: 15%

TESTING PLAN FOR THE SENIOR MUSICIAN COURSE
A-450-0014
December 2018

1. Incoming diagnostic examinations based on foundational Music Theory and Ear Training will be administered to all students on the first day of class. These examinations will be used to assess the incoming knowledge level of each student. Counseling will be given to students that do not meet or exceed a minimum of 2.0 for diagnostic testing. There is no requirement for Senior Musician Course students to take an incoming, mid-term, or final instrumental/vocal performance assessment.

2. All academic testing will be criterion-referenced unless otherwise indicated. Tests will be administered to the entire class at the same time and allotted one full class period to complete the test. There are no other testing constraints for academic portions of the curriculum. Performance testing will be administered according to the Course Master Schedule; however, if logistical support for the given test is not available on that specific day/time, it may be rescheduled to accommodate those support requirements. All grades and averages will be computed to a 4.0 system to calculate Grade Point Averages (GPA).

3. The minimum passing score for all knowledge testing and coursework will be 3.0. The minimum score for skill performance testing will be on a graduated scale per unit topic requirements. The minimum grade for graduation is a passing score for all academic and applied skill areas. Students who fail to meet the minimum criteria for a test will be assigned individualized remediation to correct the deficiency. Students who fail to achieve an overall passing grade for any unit, fail any retake of a performance test, or fail to maintain the normal progression in training will be referred to an Academic Review Board (ARB). Students granted a probation period following an ARB will complete a program of remediation and retesting of deficient areas as determined by the ARB process. The grade assigned on a retest, if passed, shall be equal to the minimum passing grade for that test.

4. Unit 1: Audition Procedures

a. Audition procedures enable the student to demonstrate the course objectives as a result of classroom instruction and practical application of the curriculum.

b. Students are given detailed classroom instruction on the idiosyncrasies of musical instruments as they apply to the audition process for Navy and Marine Corps bands. The students then perform mock auditions directed by a qualified instrumental instructor and compare grades for consistency.

c. The unit grade is Pass/Fail.

5. Unit 2: Conducting

a. Conducting enables the student to demonstrate the course objectives using written and performance evaluations to assess the student's ability to conduct and rehearse a concert band. Classroom instruction will also include Concert Band Programming and Concert Band Rehearsal

Techniques. Classroom Examinations consist of multiple-choice questions and are norm-referenced.

b. Assigned musical selections will be performed for and graded by a two-member board of qualified NAVSOM instructors. The minimum score for each performance board is:

(1) Board 1: Core Wind Band Repertoire: 3.0

(2) Board 2: Pops Style Medleys and Film Music: 3.0

(3) Board 3: Orchestral Transcriptions: 3.0

(4) Final capstone performance consisting of one previously conducted board piece:
Pass/Fail

c. Minimum completion of each board is required prior to testing the next/subsequent level of the unit, and all boards will be equally weighted to determine that portion of the grade.

d. Computation of the unit grade:

(1) Coursework/Class Participation: 10%

(2) Classroom Lesson Topic Exams: 10%

(3) Applied Conducting Board 1-3 Average: 80%

6. Unit 3: Ear Training

a. Ear Training enables the student to demonstrate the course objectives as a result of classroom instruction and practical application of concepts and techniques enabling increased aural understanding and ability. Tests are performance and dictation oriented in nature, which require specific guidelines for grading to ensure that subjectivity is minimized. The instructors possess a detailed outline of the guidelines by lesson topic as a part of the test administrator's guide.

b. Performance Tests. All students begin this combination pitch and rhythm performance test with a grade of 4.0. Various increments based on the total number of possible points are deducted from the student's grade for each error made. The increment is determined by dividing 4.0 by the total number of possible points on the test. Melodic performance examples are graded by the half-bar with rhythm and pitch scored separately. There are two possible points for each half-bar. For example, a four-bar excerpt in 4/4 time will have 16 possible deductions. Performance tests are averaged together for the unit performance grade.

c. Dictation Tests. As the instructor administers aural dictation, students are required to transcribe the musical elements contained therein. These tests are scored on a 4.0 response. Rhythm and pitch errors for each example are deducted separately by the half-bar. For example, a four-bar example in 4/4 time contains 16 possible deductions. Chord progression dictation will be graded per chord given. Dictation tests are averaged together for the unit dictation average.

d. Final Examination. The Final Exam will consist of dictation and performance of melodies, chords, and chord progressions.

e. Computation of the unit grade:

(1) Coursework: 10%

(2) Quizzes: 20%

(3) Performance Tests: 30%

(4) Dictation Tests: 30%

(5) Final Exam: 10%

7. Unit 4: Music Theory

a. Music Theory enables the student to demonstrate the course objectives as a result of classroom instruction and practical application of Music Theory.

b. Coursework is assigned according to the block of instruction being taught. The coursework average is compiled by averaging all assignments by lesson topic and then averaging all lesson topic coursework grades for the unit coursework average. Error deductions are computed by raw score average with zero errors scoring a 4.0.

c. Lesson topic exams consist of a combination of questions to include multiple-choice, true or false, matching, and practical application. All lesson topic exams are averaged together for the unit exam grade.

d. The comprehensive final exam consists of a combination of questions to include multiple-choice, true or false, matching, and practical application. The final exam is graded in the same manner as the Lesson Topic Exam and will be given at the completion of the unit.

e. Computation of the unit grade:

(1) Coursework/Progress Tests: 10%

(2) Lesson Topic Exams: 50%

(3) Final Exam: 40%

8. Unit 5: Symphonic Jazz Ensemble Arranging

a. Symphonic Jazz Ensemble Arranging enables the student to demonstrate the course objectives and provides a practical means of assessing the student's ability to critically analyze voicing techniques and write an instrumental arrangement for a large jazz ensemble, with vocalist, in a concert band setting.

b. Coursework is assigned according to the block of instruction being taught. The coursework average is compiled by averaging all assignments by lesson topic and then averaging all lesson topic coursework averages for the unit coursework average. Error deductions are computed by raw score average with zero errors scoring a 4.0.

c. The project is graded using the arranging evaluation rubric and will be performed for and graded by a three-member board of qualified NAVSOM staff members.

d. Computation of the unit grade:

(1) Coursework/Progress Tests: 30%

(2) Project Grade: 70%

9. Unit 6: Concert Band Medley Arranging

a. Concert Band Medley Arranging enables the student to demonstrate the course objectives and provides a practical means of assessing the student's ability to critically analyze voicing techniques and write arrangements for concert band/wind ensemble.

b. Coursework is assigned according to the block of instruction being taught. The unit coursework grade is determined by averaging all assignment grades by lesson topic and then averaging all lesson topic coursework grades. Error deductions are computed by raw score average with zero errors scoring a 4.0.

c. Projects are graded using the arranging evaluation rubric and will be performed for and graded by a three-member board of qualified NAVSOM staff members. The minimum passing grade for each project is 3.0.

d. Computation of the unit grade:

(1) Coursework/Progress Tests: 30%

(2) Project Average: 70%

10. Unit 7: Form and Analysis

a. Form and Analysis enables the student to demonstrate the course objectives as a result of classroom instruction and practical application.

b. Coursework is assigned according to the block of instruction being taught. The unit coursework grade is determined by averaging all assignment grades by lesson topic and then averaging all lesson topic coursework grades. Error deductions are computed by raw score average with zero errors scoring a 4.0.

c. Lesson topic exams consist of a combination of questions to include multiple-choice, true or false, matching, and practical application. All lesson topic exams are averaged together for the unit exam grade.

d. Computation of the unit grade:

(1) Coursework/Quizzes: 10%

(2) Lesson Topic Exams: 60%

(3) Final Exam: 30%

11. Unit 8: Music History

a. Music History enables the student to demonstrate the course objectives as a result of classroom instruction and practical application.

b. Lesson Topic Exams are multiple-choice.

c. The Final Exam consists of a combination of questions to include multiple-choice, true or false, matching, and practical application.

d. Computation of the unit grade:

(1) Lesson Topic Exams: 70%

(2) Final Exam: 30%

12. Unit 9: Large Contemporary Ensemble Rehearsal Techniques (CERT)

a. CERT enables the student to demonstrate the course objectives as a result of classroom instruction and practical application in rehearsal techniques as applied to large contemporary ensembles (jazz ensembles).

b. Assigned musical selections will be performed for and graded by a three-member board of qualified NAVSOM instructors. The minimum score for each performance board is as follows:

(1) Board 1: Intermediate Level Swing: 3.0

(2) Board 2: Difficult Level Swing, Funk, Rock or Latin: 3.0

c. Minimum completion of each board is required prior to testing the subsequent level of the unit, and both boards will be equally weighted to determine that portion of the grade.

d. Computation of the unit grade:

(1) Classroom Lesson Topic Exam: 20%

(2) CERT Boards: 80%

13. Unit 10: Counterpoint

a. Counterpoint enables the student to demonstrate the course objectives as a result of classroom instruction and practical application of basic counterpoint techniques.

b. Coursework is assigned according to the block of instruction being taught. The unit coursework grade is determined by averaging all assignment grades by lesson topic and then averaging all lesson topic coursework grades. Error deductions are computed by raw score average with zero errors scoring a 4.0.

c. Lesson topic exams consist of a combination of questions to include multiple-choice, true or false, matching, and practical application. All lesson topic exams are averaged together for the unit exam grade.

d. The Final Project is a student composition using a combination of counterpoint techniques, voicing specifications, chromaticism, and a proper cadence.

e. Computation of the unit grade:

(1) Coursework/Progress Tests: 10%

(2) Lesson Topic Exams: 50%

(3) Final Project: 20%

(4) Final Exam: 20%

14. Unit 11: Band and Library Management

a. Introduction to Band and Library Management enables the student to demonstrate the course objectives as a result of classroom instruction, projects, and become familiarized with the policies and procedures that govern the Navy and Marine Corps Music Programs.

b. Method of computing Band Management grade:

(1) Coursework: 10%

(2) Final Exam: 90%

c. Method of computing Library Management grade:

(1) Final Exam: 100%

d. Computation of the unit grade:

(1) Unit Logistics: 50%

(2) Library Management: 50%

15. Computation of the Final Course Grade:

- a. Conducting: 20%
- b. Ear Training: 20%
- c. Theory: 5%
- d. Symphonic Jazz Ensemble Arranging: 10%
- e. Concert Band Medley Arranging: 10%
- f. Form and Analysis: 5%
- g. Music History: 5%
- h. Contemporary Ensemble Rehearsal Techniques: 15%
- i. Counterpoint: 5%
- j. Band and Library Management: 5%

TESTING PLAN FOR THE SOUND REINFORCEMENT TECHNICIAN COURSE
A-450-0018
December 2018

1. All testing will be criterion-referenced unless otherwise indicated. Tests administered on an individual basis are allotted a maximum of one full class period as a time constraint. Performance testing will be administered according to the Course Master Schedule; however, if logistical support for the given test is not available, it may be rescheduled to accommodate those support requirements. All grades and averages will be computed according to the following system: 4.0 = 100%.

2. The minimum passing score for all job sheet assessments, knowledge exams, and performance exams is 2.8 or satisfactory (SAT). The instructor adjudicates all Performance Exams through Unit 8. Students who fail to meet the minimum criteria for any test will be assigned individualized remediation to correct the deficiency. Tests will be re-administered within three days of remediation. The grade assigned on any retest shall be equal to the minimum passing grade for that test. Students who fail any retake of a performance test, or are failing to maintain the normal progression in training will be referred to an ARB. Students granted a probation period following an ARB will remediate and retest the areas of deficiency.

3. Unit 1: Applied Audio

a. Applied Audio enables the student to demonstrate the course objectives as a result of classroom instruction and practical application of concepts and techniques enabling increased aural understanding and ability. Testing is based on the student's ability to accurately identify the six elements of audio and industry conventions for live audio mixing, as well as changes in amplitude and equalization via spectral awareness. Audio Test examples of sine waves, pink noise, and program material (music) are given via portable media.

b. Critical Listening. Students are assigned individual job sheets to complete over the duration of the course. Upon completion of the listening assignments, students present their work as a part of guided classroom instruction. Grades are assigned as either SAT or UNSAT based upon their individual efforts and sufficient knowledge of the subject matter.

c. Spectral Awareness is tested throughout the course.

(1) Mid-term performance assessment is administered near the beginning of week four. Students are required to correctly identify sine waves and 12-decibel boosts to pink noise and program material for the following frequencies: 125Hz, 500Hz, 2kHz, and 8kHz.

(2) Final performance assessment is administered during the final week. Students are required to correctly identify sine waves and 12-decibel boosts to pink noise and program material for the following frequencies: 125Hz, 250Hz, 500Hz, 1kHz, 2kHz, 4kHz, and 8kHz.

(3) Informal assessments are issued at the discretion of the instructor and are formatted similarly to the Mid-term and Final performance assessments.

4. Unit 2: Basic Theory of Sound Reinforcement Systems

a. Basic Theory of Sound Reinforcement Systems enables the student to demonstrate the course objectives as a result of classroom instruction and practical application. Testing for this topic is multiple-choice and is norm-referenced.

5. Unit 3: Input Transducers

a. Input Transducers enables the student to demonstrate the course objectives as a result of classroom instruction and practical application. Testing for this topic is multiple-choice and is norm-referenced.

6. Unit 4: Cabling and Connectors

a. Cabling and Connectors enables the student to demonstrate the course objectives as a result of classroom instruction and practical application. Testing for this topic is norm-referenced multiple-choice; or, in the case of cable construction and repair, product/process performance-based and graded as either SAT or UNSAT.

7. Unit 5: Signal Processors

a. Signal Processors enables the student to demonstrate the course objectives as a result of classroom instruction and practical application. Testing for this topic is norm-referenced multiple-choice, product performance-based graded as either SAT or UNSAT, or product/process performance-based with a minimum passing score of 2.8.

b. Signal Flow. Students are performance-tested on identifying the correct signal path outputs from one channel on varying analog audio consoles. The minimum passing score is 2.8.

c. Gain Structure. Students are performance-tested on the proper saturation of available voltage potential in the context of a multiple-input showband live audio mix adhering to conventional methods for optimal gain structure. Grades are assigned as SAT or UNSAT.

d. Digital Console Patching. Students are performance-tested on the correct methods for patching analog inputs and outputs to respective virtual/digital processing on varying digital audio consoles. The minimum passing score is 2.8.

e. Semi-Parametric Equalizer Operation. Students are performance-tested on the proper utilization of the components of varying semi-parametric equalizers and their ability to mitigate undesirable frequencies while operating them. Grades are assigned as SAT or UNSAT.

f. Parametric Equalizer Operation. Students are performance-tested on the proper utilization of the components of varying parametric equalizers and their ability to mitigate undesirable frequencies while operating them. Grades are assigned as SAT or UNSAT.

g. Feedback Mitigation (Ringing Out Monitors). Students are performance-tested on the proper methods for mitigation of frequency-based feedback loops in live audio systems. Grades are assigned as SAT or UNSAT.

h. Dynamics Processor Operation. Students are performance-tested on the proper utilization of the components of varying dynamics processors (e.g., compressors and noise gates) and their ability to effectively enhance performance and reduce or increase dynamic range while operating them. Grades are assigned as SAT or UNSAT.

i. Mix Ambience and Special Effects Fabrication. Students are performance-tested on the proper utilization of the components of varying multi-effects processors and their ability to effectively generate acceptable mix ambience and/or delay while operating them. Grades are assigned as SAT or UNSAT.

8. Unit 6: Output Transducers

a. Output Transducers enables the student to demonstrate the course objectives as a result of classroom instruction and practical application. Testing for this topic is multiple-choice and is norm-referenced.

9. Unit 7: Systems Operations

a. Systems Operations enables the student to demonstrate the course objectives as a result of classroom instruction and practical application. This unit represents the culmination of preceding units on the effective application of all acquired equipment utilization knowledge. Students are required to demonstrate sufficient knowledge of the “safe-system-setup” litany. Testing for this topic is norm-referenced multiple-choice, product performance-based graded as either SAT or UNSAT, or product/process performance-based with a minimum passing score of 2.8.

10. Unit 8: Systems Troubleshooting

a. Systems Troubleshooting enables the student to demonstrate the course objectives as a result of classroom instruction and practical application. Students are given various scenarios in which they must ascertain, in an efficient manner, where there is a problem with signal flow or signal degradation and properly correct the problem(s). Testing for this topic is product/process performance-based with a minimum passing score of 2.8.

11. Unit 9: Audio Mixing Basics

a. Audio Mixing Basics enables the student to demonstrate the course objectives as a result of classroom instruction and practical application. A three-member board of qualified NAVSOM and/or USASOM instructors evaluate the student’s ability to mix pre-recorded musical selections from the following idioms: Showband (Big Band), Wind Ensemble, and Popular Music Group. A separate board is convened for each idiom. Grades are computed by averaging the instructor score with the board scores, each receiving equal weight. Minimum completion of each board is required prior to testing the next idiom. The final grade for mixing performance is the average combined score of all three boards. Testing for this topic is product/process performance-based with a minimum passing score of 2.8.

12. Computation of the Final Course Grade:

- a. Written Lesson Topic Exams: 15%
- b. Lesson Topic Performance Exams: 30%
- c. Mixing Performance Boards: 45%
- d. Comprehensive Written Final Exam: 10%