

TRUMBULL PUBLIC SCHOOLS
TRUMBULL, CONNECTICUT

Curriculum Committee
of the
Trumbull Board of Education

Trumbull High School Main Office Conference Room
Wednesday, December 16, 2015 – 8:00 a.m.

AGENDA

- I. Approval/Minutes – Regular Meeting 10/30/2015
- II. New Business
 - a. Introductory Remarks, Director of Curriculum, Instruction, & Assessments
 - b. Draft for Pilot Curriculum Guide: Modern Drama
 - c. New Course Texts & Rationales
 - 1. *Fires in the Mirror* by Anna Deavere Smith
 - 2. *The Heidi Chronicles* by Wendy Wasserstein
 - 3. *Clybourne Park* by Bruce Norris
 - d. Applications of Mathematics / Algebra III Curriculum Guide
 - e. Approval of 2016 Committee Meeting Dates

TRUMBULL PUBLIC SCHOOLS
TRUMBULL, CONNECTICUT

Curriculum Committee
of the
Trumbull Board of Education

Regular Meeting

Trumbull High School Main Office Conference Room
Friday, October 30, 2015 – 8:00 a.m.

MINUTES

The meeting was called to order by Mrs. Seaman at 8:00 a.m.

Members present

R. Seaman, chair
J. Peddle
M. Ward
J. Budd, Ph.D., ex officio

Other

F. Basbagill, THS mathematics department chair
E. Capobianco, THS mathematics teacher
S. Lavorgna-Lye, THS world languages department chair
J. Lapham, THS ELL teacher
M. Guarino, THS principal
D. Owen, THS business education department chair
B. Yerina, THS business education teacher
M. McGrath, K-12 music curriculum leader
M. Holmgren, 6-8 music teacher
J. Winschel, 6-8 music teacher
K. Karlan, THS music teacher
2 members of the public

- I. Approval/Minutes – Regular Meeting 10/9/2015 – Mr. Ward moved to approve the minutes as presented; Mr. Peddle seconded. The motion was unanimously agreed to with Mr. Ward abstaining.
- II. New Business
 - a. Introductory Remarks, Director of Curriculum, Instruction, & Assessments – Dr. Budd noted that the topics on this morning’s agenda represent a variety of fine work to refine teaching and learning by educators across the district K-12.

- b. ACP Algebra II Curriculum Guide – Ms. Basbagill and Ms. Capobianco presented this curriculum guide, which was last revised in 2004. They highlighted the alignment of the curriculum with the Connecticut Core Standards and more advanced topics such as statistics, as well as the strategic use of the graphing calculator, which begins in Algebra 1. Ms. Basbagill noted that next week’s professional development will allow the math teachers to incorporate into this curriculum, as well as others, material linked to the new SAT. Mrs. Seaman observed the alignment between this curriculum and the school’s assessment rubrics, and Mr. Peddle noted the significant differences between the prior mathematics curriculum and this one. Mr. Ward expressed interest in the textbook for the course being updated to be more aligned with, and supportive, of the curriculum; Dr. Budd noted that interest in terms of potential budget opportunities for 2015-16. Mrs. Seaman moved to bring the curriculum guide to the Board of Education for approval at its meeting scheduled for November 10, 2015, and Mr. Peddle seconded. The motion was unanimously agreed to.
- c. New Course Text & Rationale: *Keystone D* (Pearson English Learning System) – Ms. Lavorgna-Lye and Ms. Lapham explained that this textbook will be used for the Beginner English Language Learners course. Currently, although several text supplements are used for the course, a textbook has not been implemented, though a textbook would be very helpful in focusing students on grammar related to academic and real-world topics. Mrs. Seaman noted that the proposed textbook does not speak down to the students, and Mr. Ward observed the key vocabulary highlighted throughout the text. Mr. Peddle inquired about the types of languages spoken by the current ELL students at Trumbull High School; Mrs. Lapham cited Arabic, Spanish, Portuguese, Russian, Korean, and Polish as current examples. Dr. Budd explained that the current textbook budget will support the purchase of these texts for the one section of ELL – Beginner Level, and will significantly positively influence those students’ learning this year. Mrs. Seaman moved to bring the textbook to the Board of Education for approval at its meeting scheduled for November 10, 2015, and Mr. Peddle seconded. The motion was unanimously agreed to.
- f. New Course Proposals
1. Advanced Placement Studio Art
 2. Advanced Placement Music Theory
 3. Advanced Placement United States Government and Politics
 4. Advanced Placement Comparative Government and Politics

The Committee unanimously agreed to take this item out of order. Mr. Guarino presented the importance of the high school’s program offering students Advanced Placement (AP) opportunities across all subject areas, including for students talented in visual arts and in music. He explained that inclusion of these new AP course offerings in the 2016-17 *THS Program of Studies* would allow the school to assess student interest in these course offerings; if sufficient interest for any course existed, a draft for pilot curriculum guide would be developed over the summer of 2016, and teachers trained to teach the course in accord with College

Board requirements. Mr. Ward inquired about the range of THS AP offerings in relation to those of other schools, and Mr. Guarino noted that these AP courses are now standard at many other DRG B high schools. Mrs. Seaman expressed the importance of keeping students motivated and involved whatever their interest areas, and Mr. Guarino and Dr. Budd indicated the district's goal for greater participation by students in AP courses across subject areas. Mr. Peddle moved to bring these four courses to the Board of Education at its meeting scheduled for November 10, 2015, for the Board to support their inclusion in the 2016-17 *Program of Studies* to solicit student interest in course curriculum development, and Mrs. Seaman seconded. The motion was unanimously agreed to.

- e. The Committee unanimously agreed to take this item out of order. Ms. Owen and Ms. Yerina presented the draft for pilot curriculum guide for Sports and Entertainment Marketing, an exciting course to align with most business education offerings in the area. Mr. Peddle noted the enthusiasm of courses in this area at Sacred Heart University. Ms. Yerina observed that many students may know a bit about agents for sports celebrities, but very little else; this course will provide them a basis for further exploration. Dr. Budd explained that the draft for pilot curriculum guide will be developed into a full curriculum guide during the summer of 2015 based on student feedback and work completed during the course pilot this school year; at this point, the Committee is asked to support the draft for pilot curriculum guide for this school year. Mrs. Seaman moved to bring the draft for pilot curriculum guide to the Board of Education for approval at its meeting scheduled for November 10, 2015, and Mr. Peddle seconded. The motion was unanimously agreed to.
- d. The Committee unanimously agreed to take this item out of order. Ms. Owen discussed this textbook, linked to the Honors CCP Marketing course that is aligned with coursework at Housatonic Community College (HCC). HCC requires this text to be updated regularly, and this 16th edition is the most recent. Ms. Owen explained that Tech Tuesdays have allowed her and others to develop GoogleClassroom activities linked to the textbook, and that the students in the course are led in their reading of this complex college textbook, which supports their work in the future at college. Mr. Ward noted several interesting current marketing examples within the text; Mrs. Seaman summarized how current and relevant the book is. Mr. Peddle explained that the text takes a sophisticated approach to marketing, moving away from past clichés. Ms. Owen explained that a class set of the books is used; Dr. Budd noted that the Perkins Grant has funded the textbook. Mrs. Seaman moved to bring the textbook to the Board of Education for approval at its meeting scheduled for November 10, 2015, and Mr. Peddle seconded. The motion was unanimously agreed to.
- g. Music Curriculum Guides
 1. Elementary Strings Year One
 2. Elementary Strings Year Two
 3. Elementary Strings Year Three

4. Beginning Strings Grade 6
5. Intermediate Strings Grades 6, 7, 8
6. Orchestra/Strings High School

The Committee unanimously agreed to take this item out of order. Mr. McGrath, Mr. Holmgren, Ms. Winschel, and Ms. Karlen presented the continuum of K-12 strings music curriculum guides, explaining their links to the four key national arts standards for music: creating, performing, responding, and connecting. Those standards, the teachers noted, dignify music as a core curriculum area, and link its work to the work of other disciplines. Mrs. Seaman noted how blessed the district has been to have outstanding music educators, and that the revised and strings curriculum guides take their work to the next important level. Mr. Ward inquired about the structure for strings education at each level of the system, and Mrs. Seaman praised the written reflective work asked of students in the program. Dr. Budd reminded the Committee of the ongoing interest in finalizing the K-12 music curriculum guides this year, a process that began with the K-5 general/vocal music guide in August, continues now with the K-12 strings music guides, and will continue in future months this year with the K-12 vocal and instrumental music guides. Mrs. Seaman moved to bring the curriculum guides to the Board of Education for approval at its meeting scheduled for November 10, 2015, and Mr. Ward seconded. The motion was unanimously agreed to.

- h. Other – Dr. Budd noted that the district had just received information from the Connecticut State Department of Education regarding the administration of the SAT for juniors this spring, and that further information would be forthcoming. He observed that this was the final meeting of the Curriculum Committee for this Board of Education prior to the November 2015 election and the constitution of new committee membership by the new Board.

Mr. Peddle moved to adjourn the meeting at 10:10 a.m.; Mr. Ward seconded. The motion was unanimously agreed to.

**TRUMBULL PUBLIC SCHOOLS
NEW COURSE PROPOSAL PROCESS**

Date Submitted: Dec. 16, 2015

Name of Course: Modern Drama

Grade Level: 12

Department: English

Length and Credit: half year, 0.5 credit

Prerequisite(s): 11th-grade English

General Description:

Dramatic literature, referring to plays written for performance on the stage, has been a part of human history since the dawn of civilization. Since the time of Sophocles and Aristophanes, playwrights have used drama to try to explain humanity's existence and to wrestle with the most pressing questions of character, conflict, and society. Modern playwrights continue this tradition, allowing audiences a window into society, contemporary character, and relevant issues through works written for the stage. In this course, students will read and analyze major works of influence in modern drama in order to explore contemporary society and gain a life-long appreciation for seminal works of theatre. In addition to reading the plays themselves, students will read criticism and conduct research on the works, the playwrights, and the issues and historical periods being portrayed. Works will be drawn from the modern era of drama (generally believed to begin with Henrik Ibsen), but short projects will also look at early influences on modern dramatic works (e.g., Shakespeare, Greek tragedies).

Rationale:

Throughout grades 9-11, students are introduced to works of drama by the masters (e.g., Shakespeare, Miller, Wilson) as part of their general survey of literature. These are the moments when some students come alive – for them, the realization of a story through dialogue and the imagining of actors on stage bringing the words to life are transformational. The grade 12 electives curriculum allows students to choose a path that appeals to them for concentrated study (e.g., science fiction or poetry), and the addition of a course on dramatic literature would meet the needs of students whose passion lies in works written for the stage.

CCSS College and Career Readiness Anchor Standard 9 states that students will “Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.” A concentrated course in drama will allow students to examine themes or issues (e.g., self-knowledge, greed, father-son relationships, gentrification) they've previously identified in novels or poetry in another genre, thereby affording them the opportunity to explore themes and topics across genres and to apply critical thinking to explore how those themes and topics manifest themselves differently in each genre. A major tenet of CCSS is developing students' ability to read and research nonfiction writing and to write their own critical arguments supported with evidence. Modern Drama will require students to read criticism of plays and productions and to analyze these real-world writings as well as develop their own evidence-supported claims.

It is the goal of the THS English Department to turn out students who are not only college- and career-ready but who are also poised to be life-long readers, writers, and theatre-goers. Students who leave high school with a kinship to a dozen or more often-produced plays will feel compelled to attend future productions at their colleges and in their communities and will, thus, come to regard interaction with and support of the arts as integral to their lives.

Resources Needed:

- *Clybourne Park* by Bruce Norris
- *Fires in the Mirror* by Anna Deavere Smith
- *The Heidi Chronicles* by Wendy Wasserstein
- Individual play titles including works by the following playwrights (some already available in THS bookroom):

Ibsen	August	Ruhl	Wilde	Durang
Williams	McNally	O’Neill	D’Amour	Albee
Miller	Herzog	Beckett	Simon	

Submitted by: Jessica Spillane, Department Chair

Reviewed by: _____	_____
Principal/Designee	Date
_____	_____
Director of Curriculum	Date
_____	_____
BOE Member	Date
_____	_____
BOE Member	Date
_____	_____
BOE Member	Date

TRUMBULL PUBLIC SCHOOLS
Trumbull, Connecticut

Modern Drama
Grade 12
Advanced College Preparatory
English Department

Draft for Pilot 2016
(New Course)

Curriculum Writing Team

Jessica Spillane, Department Chairperson

Jonathan S. Budd, Ph.D., Director of Curriculum, Instruction & Assessments

CORE VALUES AND BELIEFS

Trumbull High School community engages in an environment conducive to learning which believes that all students will **read** and **write effectively**, therefore communicating in an articulate and coherent manner. All students will participate in activities **that present problem-solving through critical thinking**. Student will use technology as a tool applying it to decision making. We believe that by fostering self-confidence, self-directed and student-centered activities, we will promote **independent thinkers and learners**. We believe **ethical conduct** to be paramount in sustaining the welcoming school climate that we presently enjoy.

Approved 8/26/2011

INTRODUCTION

Modern Drama is a senior-year, Advanced College Preparatory level, elective English course of one semester in length. The course is designed to capitalize on students' previous success with and enthusiasm for reading and analyzing plays as works of literature. While critical reading of the plays will take place in class, the course is not a drama performance course; rather, communal reading will serve to promote close text reading and collaborative analysis of each playscript, mirroring the collaborative process of theatre arts professionals. Students will deepen their cultural literacy and appreciation for the "modern" era of drama, beginning with the works of Henrik Ibsen (considered the father of modern drama) and continuing through new plays entering the public consciousness right now. Units of study will be thematically arranged, generally pairing a classic text with contemporary works. Course content will evolve over time as the course gains in popularity and new core works are introduced. Some core works will be re-reads of plays that students have previously studied in their grades 9, 10, and 11 English classes. Second readings of plays will encourage students to engage in the deep, close text reading outlined in the Connecticut Core Standards. In addition to close text reading and collaborative analysis, students will engage in writing tasks (both formal and informal) that forward claims, that inform and explain, and that use narrative to develop real or imagined experiences of events.

The Connecticut Core Standards provide a portrait of the "college and career ready" student, the student who is – ideally – a product of the skills-focused and rigorous Connecticut Core Standards. This course addresses all aspects of this portrait directly, requiring the behaviors and mindset of a student who can meet complex challenges, develop independent thinking, and then communicate that thinking effectively.

According to the College and Career Readiness portrait, these students:

- demonstrate independence.

Students in Modern Drama will be self-directed learners, utilizing shared inquiry skills to plumb the depths of a complex theatrical text. They will, without requiring significant scaffolding, critically read complex text and develop interpretations, seeking, selecting, and using relevant resources as needed.

- build strong content knowledge.

Students in Modern Drama will establish a base of knowledge by engaging with dramatic works of quality and substance that are the canon of contemporary theatre. They will read purposefully and listen attentively to gain general knowledge and discipline-specific expertise, refining and sharing their knowledge through speaking, listening, and writing.

- comprehend as well as critique.

Students in Modern Drama will be engaged and open-minded readers and listeners. They will work diligently to understand and assess, but also question sources and their veracity.

- value evidence.

Students in Modern Drama will cite specific evidence when offering interpretations and will constructively evaluate (and support) others' use of evidence.

- use technology and digital media strategically and capably.

Students in Modern Drama will employ technology thoughtfully to enhance their reading, writing, speaking, listening, and viewing. They will tailor their use of technology to the task at hand and select the most appropriate tools to achieve their communication goals.

- come to understand other perspectives and cultures.

Students in Modern Drama will appreciate that the 21st-century classroom and workplace are settings in which people from often widely divergent cultures, and who represent diverse experiences and perspectives, will learn and work together. Students will actively seek to understand other perspectives and cultures through their workshop collaborations. They will evaluate other points of view critically and constructively. Through reading exemplary works of modern dramatic literature, representative of a variety of periods, cultures, and worldviews, these students will vicariously inhabit worlds and have experiences much different from their own.

PHILOSOPHY

L.M. Elliott has noted that “plays . . . are the cry of the human spirit trying to understand itself and make sense of our world.” Recognizing this, Modern Drama will approach the study of exemplary works of theatre as the opportunity for students to “grapple with works of exceptional craft and thought [that] offer profound insights into the human condition and serve as models for students’ own thinking” (CCS RL.11-12.9).

Playscripts will be organized and studied thematically, rather than chronologically. This structure will afford students a view into the ways in which timeless themes have cemented themselves into multiple works of theatre, thereby providing students the opportunity to evaluate the progression of an idea or movement over the course of time. For example, in a unit on Gender Roles, a comparison of the concluding scenes in Ibsen’s *A Doll’s House* and Wasserstein’s *The Heidi Chronicles* will allow students to analyze the statements being made by the playwrights about a woman’s responsibilities and place in society. Coursework will also allow students to delve into the historical contexts in which plays were written and originally performed and evaluate the social and political impacts made by each play and the differences in audience perception over time. For example, in a unit on Identity and Community, while studying *A Raisin in the Sun* by Lorraine Hansberry, students might consider (and even research) how a primarily white audience in the 1950’s would have responded to the prospect of an African-American family moving into a white neighborhood and analyze how that sentiment fuels the play’s conflict; following, they might then consider the different emotional effect on a contemporary audience of diverse background.

In Modern Drama, 12th-grade students will critically read and analyze award-winning, internationally-recognized plays as complex literary texts. In grades 9-11 students have had the opportunity to read and study plays as part of a wide survey of genres. As part of THS's senior elective program, this class offers students who found particular interest in or success with the study of plays to pursue their zeal in a specialized course (as the Department's other courses do). This class will offer a collaborative seminar/workshop environment in which students can acquire and hone reading, writing, speaking, and listening skills and learn from one another while applying their analyses of dramatic texts to the thematic study of social, political, and psychological topics. The students will leave the course with a better understanding of the analysis of literary texts, advanced practice in the close reading of language and dramatic texts, and a greater capacity for writing, collaborative analysis, and critical viewing. Additionally, the course aims to cultivate individuals who will become life-long theater-goers and supporters of the arts by connecting them intimately to a foundation of seminal, often-produced, works.

Unit 1: An Introduction to Modern Drama

Essential Questions

- What defines the “modern” era of drama?
- What are the elements of theatre history that have led to the evolution of “modern drama?”

Core Resources

- excerpts from *Theater: Preparation and Performance* (1989) by David Grote
- excerpts from *Basic Drama Projects* (2004) by Fran Averett Tanner
- online resources

Possible Learner Activities

- Research the history of theatre and the timeline that has led to the modern era
- Read excerpts from influential texts throughout theatre history and analyze dramatic structure, tropes, and devices
- Develop a class “timeline” of theatre history, using Voicethread, Prezi, or other technological tools to collaborate and convey essential learnings
- Critically view and analyze “National Theater Discover” series on YouTube to develop background knowledge of theatre history

Possible Extension Activities

- Hear presentations by THS social studies instructors on historical contexts of eras in drama

Unit 2: Identity and Community in Modern Drama

Essential Questions

- How do identity and community serve as major catalysts for conflict in modern drama?
- Why have identity and community surfaced as prominent elements of modern drama? What historical, political, sociological, and psychological influences have contributed to this movement?
- How do modern dramatists explore and convey identity and community?

Core Resources

- *A Raisin in the Sun* by Lorraine Hansberry
- *Clybourne Park* by Bruce Norris
- selected one-act plays

Possible Learner Activities

- Research historical, sociological, and political contributors to the civil rights movement, Fair Housing Act, “white flight,” and gentrification
- View and critically compare productions of *A Raisin in the Sun*
- Create and present marketing and media materials for productions of *A Raisin in the Sun* and *Clybourne Park*, linking materials to text evidence that indicates theme, conflict, etc.
- Write a short original 10-minute play, using the elements of modern theatre studied in Unit 1, that explores a contemporary issue of identity and/or community
- Compare/contrast critics’ reviews of original Broadway productions of *A Raisin in the Sun* and *Clybourne Park*. Illustrate similarities and differences and discuss social implications of each.
- Research and analyze interviews with Hansberry and Norris to determine influences and aims of each work

Possible Extension Activities

- Attend production (if available) of core dramatic text
- Communicate with Bruce Norris (living playwright) to ask questions and share responses to the play

Unit 3: Gender Roles in Modern Drama

Essential Questions

- Why/how has gender become a significant element of the modern drama experience?
- In what ways has the treatment of gender identity evolved over the course of the modern era?
- What are the implications of gender identity in this modern age of “blind casting”?

Core Resources

- *A Doll’s House* by Henrik Ibsen
- *The Heidi Chronicles* by Wendy Wasserstein
- selected one-act plays

Possible Learner Activities

- Research the “gender-blind casting” movement in contemporary theater and prepare a presentation for the class
- Research the women’s rights movement and develop a timeline that illustrates its influence on modern drama
- Adapt a time-honored short play (or a scene from a longer play) to reflect the gender roles of another era or setting; execute the dramaturgical research necessary for re-setting play; discuss the implications on the new work

Possible Extension Activities

- In-school field trip/presentation with gender studies professor from a local university
- In-school field trip/presentation (or Skype session) with director of the Arts Integrity Initiative at The New School

Unit 4: Structure and Voice in Modern Drama

Essential Questions

- How has structure changed in the evolution of theatre? Does “structure” even have a role in today’s contemporary theatre?
- How do playwrights create “voice” on both a macro and micro level in a play?

Core Resources

- *Waiting for Godot* by Samuel Beckett
- *Spoon River Anthology* (adapted from Edgar Lee Masters)
- *Fires in the Mirror* by Anna Deavere Smith
- selected one-act plays

Possible Learner Activities

- Read and analyze critical reviews of modern drama pieces (e.g., from the *New York Times*) with a focus on structural developments and innovations
- Collaborate to create a timeline of structural movements in modern drama (e.g., the move from the two-act domestic drama to Absurdism)
- Create a dramatic text that blends traditional theatre structure and voice with modern innovations (e.g., the blend of journalistic reporting and monologues seen in *Fires in the Mirror*)

Possible Extension Activities

- Using GoogleDocs, publish an online *Eagle’s Eye* edition that uses dramatic structure to cover traditional news issues
- Master class with theatre students (e.g., from WCSU, Yale, Hartt) focused on developing a dramatic monologue for presentation on the stage

Unit 5: Shared Inquiry / Literature Circles

Essential Questions

- What makes a contemporary play “groundbreaking” or “influential”?
- Does theatre have the power to transform social consciousness?
- What trends can we recognize and predict in theatre based on current contemporary works?
- How does modern drama fit into the landscape of contemporary art and literature?

Core Resources

- selected one-acts and full-length plays of students’ choice

Possible Learner Activities

- Jigsaw groups present plays to each other to provide maximum exposure to contemporary works
- Students lead “pitch meetings” at which they work to persuade a Board of Directors or group of investors to produce a particular play
- Write letters to / tweet contemporary playwrights with questions/commentary
- Lit Circle groups use technology to engage in Google group chats / Google hangouts to extend discussion opportunities beyond the classroom

Possible Extension Activities

- Collaborate with Creative Writing class to analyze and give feedback on original student works and/or with THeSpians to produce scenes from contemporary works

**TRUMBULL PUBLIC SCHOOLS
NEW TEXTBOOK REVIEW/APPROVAL PROCESS**

Date Submitted: Dec. 16, 2015

Title of Book: *Fires in the Mirror: Crown Heights, Brooklyn and Other Identities*

Author: Anna Deavere Smith

Publisher: Dramatists Play Service, Inc.

Year Published: 1997

ISBN: 978-0-8222-1329-1

Core or Supplemental Text: Core

Grade Level: 12

Course: Modern Drama

Book Description:

Fires in the Mirror is, quite simply, the most compelling and sophisticated view of urban racial and class conflict . . . that one could hope to encounter And it is ingenious in concept. An interwoven series of brief monologues by nearly 30 characters, ranging from the famous to the notorious to the nameless, the show consists entirely of verbatim excerpts from fresh interviews Ms. Smith conducted with her subjects. As an interviewer, she seems to have Studs Terkel's knack for gaining the confidence of a wide variety of people and inducing them to reveal themselves in haunting offhand anecdotes and reminiscences." (Frank Rich, "Diversities of America in One-Person Shows," *The New York Times* May 15, 1992)

Purpose/Need: New course

Other (How will the book enhance student performance?)

A collection of monologues which evolved from interviews, this dramatic text addresses CCS RL.11-12.5, via which students will "analyze how an author's choices concerning how to structure specific parts of a text contribute to overall structure and meaning as well as aesthetic impact," as well as CCS RL.11-12.4, via which students will "determine the meaning of words and phrases . . . and analyze specific word choices . . . and language that is particularly fresh or engaging or beautiful." In particular, this text will allow students to examine authors' use of interviews to create dramatic text structures. Paired with *Waiting for Godot* and *Spoon River Anthology*, it will allow investigation of structure and voice in texts that are topically and structurally diverse, yet compelling in their own rights and own ways.

Strengths:

This dramatic piece will work well as a paired text in the unit on structure and voice in modern drama. Derived completely from over fifty real interviews conducted by the playwright herself, this play offers a critical look at how research and primary source documents might evolve into a theatrical piece intended for a live audience. The interviews and subsequent monologues will offer a perspective into contemporary issues including racial and class inequality, politics, and survival. The format (since the play was originally performed as a one-woman show) will offer a unique look at structure and casting of a dramatic work.

Weaknesses:

Having not been alive in 1991, none of the students will have actual memory of racial tensions in the 1990's. Additionally, students may struggle with the concept of a wide array of characters all being played by a single

female actor. This will, however, open opportunities to explore the concept of willing suspension of disbelief and to discuss the pros and cons (and legalities) of changing a work's original intent.

Submitted by: Jessica Spillane, Department Chair

Reviewed by: _____	_____
Principal/Designee	Date
_____	_____
Director of Curriculum	Date
_____	_____
BOE Member	Date
_____	_____
BOE Member	Date
_____	_____
BOE Member	Date

**TRUMBULL PUBLIC SCHOOLS
NEW TEXTBOOK REVIEW/APPROVAL PROCESS**

Date Submitted: Dec. 16, 2015

Title of Book: *The Heidi Chronicles*
Author: Wendy Wasserstein
Publisher: Dramatists Play Service, Inc.
Year Published: 1990
ISBN: 978-0-8222-0510-4
Core or Supplemental Text: Core
Grade Level: 12
Course: Modern Drama

Book Description:

“Comprised of a series of interrelated scenes, the play traces the coming of age of Heidi Holland, a successful art historian, as she tries to find her bearings in a rapidly changing world. Gradually distancing herself from her friends, she watches them move from the idealism and political radicalism of their college years through militant feminism and, eventually, back to the materialism that they had sought to reject in the first place Eventually Heidi comes to accept the fact that liberation can be achieved only if one is true to oneself, with goals that come out of need rather than circumstance. As the play ends she is still ‘alone,’ . . . but it is clear that she has begun to find a sense of fulfillment and continuity that may well continue to elude the others of her anxious and self-centered generation.” (adapted from script’s back cover synopsis)

Purpose/Need: New course

Other (How will the book enhance student performance?)

Paired with a seminal text of modern drama, *A Doll’s House* by Henrik Ibsen, this text will offer students a unit that presents the opportunity to consider themes of feminism and the characterization of female characters and compare their treatment in two different works (a central tenet of CCS).

Strengths:

Wendy Wasserstein is considered one of the most influential playwrights of her time and the preeminent voice of modern feminist theater, influencing modern artists as Sarah Ruhl and Jeanine Tesori. This play was Wasserstein’s greatest work and was awarded the Pulitzer Prize for Drama in addition to the Tony Award, the New York Drama Critics Award, The Outer Critics Award, The Drama Desk Award, and a variety of other honors. Its episodic structure, setting each scene in another phase of the protagonist’s life, not only tells the story of the main character but also chronicles the development of the women’s rights movement from the 1960s to the 1990s.

Weaknesses:

Because it ends in the 1990’s, the play does not tell the most current chapter of the women’s rights movement and may seem incomplete to young men and women of the new millennium; thus, a possible summative assessment would be for students to write their own epilogue or final scene for the play. Additionally, students born in a post-ERA America may have a difficult time appreciating the journey that it took to get where our

society is today. That challenge presents another excellent opportunity for teaching history in tandem with English language arts.

Submitted by: Jessica Spillane, Department Chair

Reviewed by: _____	_____
Principal/Designee	Date
_____	_____
Director of Curriculum	Date
_____	_____
BOE Member	Date
_____	_____
BOE Member	Date
_____	_____
BOE Member	Date

**TRUMBULL PUBLIC SCHOOLS
NEW TEXTBOOK REVIEW/APPROVAL PROCESS**

Date Submitted: Dec. 16, 2015

Title of Book: *Clybourne Park*
Author: Bruce Norris
Publisher: Dramatists Play Service, Inc.
Year Published: 2012
ISBN: 978-0-8222-2697-0
Core or Supplemental Text: Core
Grade Level: 12
Course: Modern Drama

Book Description:

Winner of the 2011 Pulitzer Prize and 2012 Tony Award for Best Play, *Clybourne Park* takes Lorraine Hansberry’s seminal play about the mid-century African-American experience, *A Raisin in the Sun*, and asks the question: What circumstances might have led to the first black family moving into a white suburb in 1950’s Chicago? Mining characters from the original while also creating wholly new, contemporary voices, Norris’s work probes race, gentrification, and the human interactions we all encounter in our diverse culture.

Purpose/Need: New course

Other (How will the book enhance student performance?)

Norris’s expert use of dialogue to illustrate the power of language in our society will provide students with myriad opportunities to assess author’s craft and structure, specifically to “analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant” (CCS RL.11-12.6).

Strengths:

Clybourne Park will offer students the opportunity to revisit a core grade 10 text (*A Raisin in the Sun*) and then explore a contemporary playwright’s vision of the circumstances and consequences of mid-century racism and the birth of the civil rights movement. Paired with *A Raisin in the Sun* and other supplemental works, this text will create the foundation for a stirring unit on race in the United States as portrayed on the stage. This work will provide ample opportunity to partner history and economics study with the study of the actual play in order to provide appropriate background.

Weaknesses:

A challenge in teaching this work will be encouraging students to revisit a work they read two years ago in order to have appropriate background. Additionally, students may not have the background in the timeline of the civil rights movement and gentrification, which will require some frontloading of this information in order for students to appreciate the nuances of the play.

Submitted by: Jessica Spillane, Department Chair

Reviewed by: _____

Principal/Designee	Date
_____ Director of Curriculum	_____ Date
_____ BOE Member	_____ Date
_____ BOE Member	_____ Date
_____ BOE Member	_____ Date

TRUMBULL PUBLIC SCHOOLS
Trumbull, Connecticut

Applications of Mathematics / Algebra III
College Preparatory
Mathematics Department
Trumbull High School

2015

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Applications of Mathematics / Algebra III

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The Trumbull Board of Education will continue to take Affirmative Action to ensure that no persons are discriminated against in its employment.

TRUMBULL HIGH SCHOOL CORE VALUES AND BELIEFS STATEMENT

Trumbull High School community engages in an environment conducive to learning which believes that all students will **read** and **write effectively**, therefore communicating in an articulate and coherent manner. All students will participate in activities **that present problem-solving through critical thinking**. Student will use technology as a tool applying it to decision making. We believe that by fostering self-confidence, self-directed and student-centered activities, we will promote **independent thinkers and learners**. We believe **ethical conduct** to be paramount in sustaining the welcoming school climate that we presently enjoy.

Approved 8/26/2011

INTRODUCTION

This course is designed for seniors who have completed three years of mathematics on the college-preparatory level and who would like to continue the study of mathematics in their senior year. The course includes a number of interesting topics of mathematics, topics selected to better prepare students for the next steps in their lives: college, trade school, or the workplace.

The purpose of this course is to prepare seniors for what lies ahead: SAT and ACT exams, placement tests, entrance exams, college algebra, the mathematics involved in various certifications, and survival-skill mathematics.

Topics include:

- Probability
- Statistics
- SAT and ACT preparation
- Finance
- Trigonometry
- Exponential functions
- Linear equations and systems of linear equations
- Quadratic equations: factoring, finding solutions
- EXCEL fundamentals
- Arithmetic operations with algebraic rationals
- Algebra review in preparation for College Placement tests and for SAT and ACT exams

PHILOSOPHY

Success in mathematics depends upon active involvement in a variety of interrelated experiences. When students participate in stimulating learning opportunities, they can reach their full potential.

The Trumbull Mathematics Program embraces these goals for all students.

The successful mathematician will:

- Acquire the factual knowledge necessary to solve problems
- Gain procedural proficiency in problem solving
- Demonstrate a perceptual understanding of problems posed
- Make meaningful mathematical connections to his or her world
- Solve problems utilizing a variety of strategies
- Utilize technology to improve the quality of the problem-solving process
- Communicate effectively using mathematical terminology, both independently and collaboratively
- Use sound mathematical reasoning by utilizing the power of conjecture and proof in his or her thinking
- Become a reflective thinker through continuous self-evaluation
- Become an independent, self-motivated, lifelong learner

The Trumbull Mathematics Program promotes the empowerment of students and encourages students to embrace the skills needed to become successful in the 21st century. Students expand their mathematical abilities by investigating real-world phenomena. Through such experiences, students can access the beauty and power of mathematics and truly appreciate the impact mathematics has on the world in which they live.

Developed by Trumbull K-12 Math Committee, June 2004; revised and approved April 2011

COURSE DESCRIPTION

Applications of Mathematics / Algebra III is a third-year algebra class designed to prepare seniors for the SAT, for college-level mathematics courses, and for the workplace. Applications of Mathematics / Algebra III includes topics such as probability, statistics, linear programming, finance, logarithms, exponential functions, and algebra review in preparation for students' SAT and ACT exams and college placement tests.

GOALS

The Standards for Mathematical Practice describe varieties of expertise that all teachers of mathematics will develop in their students.

These practices rest on important “processes and proficiencies” that have long been valued in mathematics education.

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary.

2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved.

Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is.

4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace.

Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and the tools' limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data.

They are able to use technological tools to explore and deepen their understanding of concepts.

6. Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning.

They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, expressing numerical answers with a degree of precision appropriate for the problem context. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure.

They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects.

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

METHODS OF ASSESSMENT

A student's grade will include the teacher's evaluation in the following areas:

Assignments, both in and out of class, assessed on:

- completeness, neatness, effort, accuracy, critical thinking, resourcefulness, organization

Tests & Quizzes, mainly criterion-referenced, assessed on:

- understanding of concepts, techniques, and skills
- applying concepts
- connecting concepts
- writing with correct notation & symbols
- organization

Projects & Tasks, assessed on:

- mathematical accuracy
- sophistication of response
- clarity of writing/explanation
- use of mathematical support in decision or recommendation
- adherence to other criteria detailed in assessment lists

Department Midyear and Final Exams, mainly norm-referenced, in various formats:

- standard multiple-choice (e.g., SAT)
- free response

Other Possible Grade Determinants:

- participation
- notebook
- journal
- projects

Unit 1: College, Trade School, and Career Planning

Performance Standards

The TPS-created objective is:

- The learner will research a desired career and summarize results in a formal paper.

Essential Question

- Where will I be next year?

Content (Scope and Sequence)

Discuss careers and their prerequisites

Research desired careers and educational prerequisites

Prepare paper with findings

Instructional/Teaching Strategies

Guiding discussion and research

Technology Competency Standards

1. Creativity and Innovation – Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
2. Communication and Collaboration – Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
4. Critical Thinking, Problem Solving, and Decision Making – Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

Assured Experiences (Projects)

Student-led discussion, class participation, and classwork

Student-created research paper

Time Allocation

Approximately 1 week

Unit 2: SAT and ACT Preparation

Performance Standards

The TPS-created objectives are:

- The learner will utilize practice SAT and ACT exams to determine the need for review of various topics.
- The learner will become acquainted with the best use of a calculator during the SAT and ACT exams.

Essential Questions

- What are the current structures of the SAT and ACT exams?
- What are the current scoring methods for the exams?
- What are the differences between calculator and no-calculator questions?
- What are the mathematics topics covered in the exams?

Content (Scope and Sequence)

Complete SAT and ACT online practice tests

Complete SAT and ACT study guides and review material as necessary

Instructional/Teaching Strategies

Helping students set objectives, Providing feedback, Reinforcing effort and providing recognition, Offering targeted homework and practice, Questioning-and-answering, Modeling, Providing guided and independent practice, Cooperative learning

Technology Competency Standards

1. Creativity and Innovation – Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
2. Communication and Collaboration – Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
4. Critical Thinking, Problem Solving, and Decision Making – Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

Assured Experiences (Projects)

Student-led discussion, class participation, classwork, and homework

Performance-based assessment

Teacher-created quizzes and tests

Time Allocation

Approximately 3 weeks

Unit 3: Linear Programming

Performance Standards

The Performance Standards align with the Connecticut Core Standards for Mathematics.

A-REI Reasoning with Equations and Inequalities

Solve systems of equations

6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

Represent and solve equations and inequalities graphically

10. Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).
11. Explain why the x -coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear functions.
12. Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

Essential Question

- What are the relationships between real-world problems and linear programming?

Content (Scope and Sequence)

Solve systems of linear equations by graphing on the coordinate plane

Solve inequalities by graphing on the coordinate plane

Solve systems of inequalities via the strategies of linear programming

Use linear programming to solve real-world problems

Instructional/Teaching Strategies

Helping students set objectives, Providing feedback, Reinforcing effort and providing recognition, Offering targeted homework and practice, Questioning-and-answering, Modeling, Providing guided and independent practice, Cooperative learning

Technology Competency Standards

1. Creativity and Innovation – Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
2. Communication and Collaboration – Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
4. Critical Thinking, Problem Solving, and Decision Making – Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

Assured Experiences (Projects)

Student-led discussion, class participation, classwork, and homework

Performance-based assessment

Teacher-created quizzes and tests

Time Allocation

Approximately 4 weeks

Unit 4: Probability

Performance Standards

The Performance Standards align with the Connecticut Core Standards for Mathematics. For this unit, the Standards are below grade level.

7.SP Statistics and Probability

Investigate chance processes and develop, use, and evaluate probability models.

5. Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.
6. Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. *For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.*
7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.
 - a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.*
 - b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?*
8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.
 - a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.
 - b. Represent sample spaces for compound events using methods such as organized lists, tables, and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event.

Essential Questions

- How does the science of probability relate to real-world applications (e.g., automobile insurance, baseball)?
- What is the difference between the expectancy and the probability of an event’s occurring?

Content (Scope and Sequence)

Learn vocabulary of probability, including *outcomes, sample space, event, independent events, dependent events, Fundamental Counting Principle*

Determine sample space

Solve problems with independent and dependent events, permutations, and combinations

Find odds of single and multiple events

Find probability of mutually inclusive and exclusive events

Instructional/Teaching Strategies

Helping students set objectives, Providing feedback, Reinforcing effort and providing recognition, Offering targeted homework and practice, Questioning-and-answering, Modeling, Providing guided and independent practice, Cooperative learning

Technology Competency Standards

1. Creativity and Innovation – Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
2. Communication and Collaboration – Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
4. Critical Thinking, Problem Solving, and Decision Making – Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

Assured Experiences (Projects)

Student-led discussion, class participation, classwork, and homework

Activity involving rolling dice and determining sample space and various probabilities

Performance-based assessment

Teacher-created quizzes and tests

Time Allocation

Approximately 4 weeks

Unit 5: Statistics

Performance Standards

The Performance Standards align with the Connecticut Core Standards for Mathematics.

S-ID Interpreting Categorical and Quantitative Data

Summarize, represent, and interpret data on a single count or measurement variable

1. Represent data with plots on the real number line (dot plots, histograms, and box plots).
2. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.
3. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).
4. Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.

Summarize, represent, and interpret data on two categorical and quantitative variables

5. Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.

Essential Questions

- How can I measure central tendency to represent a set of data?
- How can I measure variation for a set of data?
- How can I determine whether a set of data appears to be normally distributed or skewed?
- How can I solve problems involving normally-distributed data?

Content (Scope and Sequence)

Create charts and graphs from a data set

Interpret charts and graphs

Calculate relative frequency, finding measures of central tendency and variation of the data

Use normally-distributed data to answer real-world application

Develop strategy for collecting data and organizing results

Instructional/Teaching Strategies

Helping students set objectives, Providing feedback, Reinforcing effort and providing recognition, Offering targeted homework and practice, Questioning-and-answering, Modeling, Providing guided and independent practice, Cooperative learning

Technology Competency Standards

1. Creativity and Innovation – Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
4. Critical Thinking, Problem Solving, and Decision Making – Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

Assured Experiences (Projects)

Student-led discussion, class participation, classwork, and homework

Survey project

Teacher-created quizzes and tests

Time Allocation

Approximately 4 weeks

Midyear Review & Midyear Exam

Time Allocation

Approximately 2 weeks

Unit 6: Operations with Rational Algebraic Expressions

Performance Standards

The Performance Standards align with the Connecticut Core Standards for Mathematics.

A-APR Arithmetic with Polynomials and Rational Expressions

Perform arithmetic operations on polynomials

1. Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

Understand the relationship between zeros and factors of polynomials

2. Know and apply the Remainder Theorem: For a polynomial $p(x)$ and a number a , the remainder on division by $x - a$ is $p(a)$, so $p(a) = 0$ if and only if $(x - a)$ is a factor of $p(x)$.

Rewrite rational expressions

6. Rewrite simple rational expressions in different forms; write $\frac{a(x)}{b(x)}$ in the form $q(x) + \frac{r(x)}{b(x)}$, where $a(x)$, $b(x)$, and $r(x)$ are polynomials with the degree of $r(x)$ less than the degree of $b(x)$, using inspection, long division, [and factoring].
7. Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.

Essential Questions

- Can a rational expression be factored?
- What is the simplified form of a rational expression?
- What is a Least Common Multiple?

Content (Scope and Sequence)

Simplify rational expressions using multiplication, division, addition, subtraction, and factoring
Solve rational equations

Instructional/Teaching Strategies

Helping students set objectives, Providing feedback, Reinforcing effort and providing recognition, Offering targeted homework and practice, Questioning-and-answering, Modeling, Providing guided and independent practice, Cooperative learning

Assured Experiences (Projects)

Student-led discussion, class participation, classwork, and homework
Teacher-created quizzes and tests

Time Allocation

Approximately 4 weeks

Unit 7: Fundamentals of Trigonometry

Performance Standards

The Performance Standards align with the Connecticut Core Standards for Mathematics.

F-TF Trigonometric Functions

Extend the domain of trigonometric functions using the unit circle

1. Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.
3. Use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi/3$, $\pi/4$, and $\pi/6$, and use the unit circle to express the values of sine, cosine, and tangent for $\pi-x$, $\pi+x$, and $2\pi-x$ in terms of their values for x , where x is any real number.
5. Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.
7. Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context.

Essential Questions

- How do the angles in a right triangle relate to the sides of that triangle?
- How can trigonometry help solve real-world problems?

Content (Scope and Sequence)

Review trigonometric functions

Use trigonometric functions to solve right-triangle problems: finding sides using angles, and finding angles using sides

Instructional/Teaching Strategies

Helping students set objectives, Providing feedback, reinforcing effort and providing recognition, Offering targeted homework and practice, Questioning-and-answering, Modeling, Providing guided and independent practice, Cooperative learning, Finding trigonometric values by appropriately using calculator instead of using a trigonometric table, Converting between degrees and radians

Technology Competency Standards

4. Critical Thinking, Problem Solving, and Decision Making – Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

Assured Experiences (Projects)

Student-led discussion, class participation, classwork, and homework

Teacher-created quizzes and tests

Time Allocation

Approximately 4 weeks

Unit 8: Placement Test Preparation

Performance Standards

This particular unit does not align with the Connecticut Core Standards for Mathematics.

Essential Questions

- How do I prepare for the college placement test that does not allow me to use a calculator?

Content (Scope and Sequence)

Complete practice tests and review material as necessary

Instructional/Teaching Strategies

Helping students set objectives, Providing feedback, reinforcing effort and providing recognition, Offering targeted homework and practice, Questioning-and-answering, Modeling, Providing guided and independent practice, Cooperative learning

Assured Experiences (Projects)

Student-led discussion, class participation, classwork, and homework

Teacher-created quizzes and tests

Time Allocation

Approximately 2 weeks

Unit 9: Personal Finance

Performance Standards

The Performance Standards align with the Connecticut Core Standards for Mathematics.

F-LE Linear, Quadratic, and Exponential Models

Construct and compare linear, quadratic, and exponential models and solve problems

1. Distinguish between situations that can be modeled with linear functions and with exponential functions.
 - b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.
 - c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

Essential Questions

- How do I balance a checkbook?
- How do I calculate payments for a loan?
- How do I create a budget?
- How do I calculate state, federal, and FICA taxes?

Content (Scope and Sequence)

Calculate simple, compounded, and continuously compounded interest

Calculate monthly payments on various loans, including automobile loans, credit cards, and student loans

Understand how to calculate payroll deductions

Prepare an individualized budget

Instructional/Teaching Strategies

Helping students set objectives, Providing feedback, reinforcing effort and providing recognition, Offering targeted homework and practice, Questioning-and-answering, Modeling, Providing guided and independent practice, Cooperative learning

Assured Experiences (Projects)

Student-led discussion, class participation, classwork, and homework

Budget project

Teacher-created quizzes and tests

Time Allocation

Approximately 5 weeks

Final Review & Final Exam

Time Allocation

Approximately 2 weeks

COURSE CREDIT

One credit in Geometry (mathematics)

One class period daily for a full year

Level: College Preparatory

PREREQUISITES

Completion of Algebra II with a C+ or better.

TEXT

Algebra 2, Glencoe/McGraw Hill, 2003

SUPPLEMENTARY MATERIALS/RESOURCES/TECHNOLOGY

Practice masters

Study guides

Enrichment

5-minute checks (may be used as quizzes)

SAT/ACT study guides

math.glencoe.com (for computer assistance for study or homework help)

CURRENT REFERENCES

Common Core State Standards - Mathematics

http://www.corestandards.org/assets/CCSSI_Math%20Standards.pdf

Trumbull High School

Core Values and Beliefs Statement

The Trumbull High School Community, which engages in an environment conducive to learning, believes that all students will READ and WRITE EFFECTIVELY, therefore communicating in an articulate and coherent manner. All students will participate in activities that address PROBLEM-SOLVING THROUGH CRITICAL THINKING. Students will use TECHNOLOGY as a tool in DECISION MAKING. We believe that by fostering self-confidence, self-directed and student-centered activities, we will encourage INDEPENDENT THINKING AND LEARNING. We believe ETHICAL CONDUCT to be paramount in sustaining our welcoming school climate.

Syllabus/Course Description

Course Name: Applications of Mathematics / Algebra III

Course Level: College Preparatory

Catalog #: 2112

Prerequisites:

Completion of Algebra II with a C+ or better.

General Description of Course Content:

Applications of Mathematics / Algebra III is a third-year algebra class designed to prepare seniors for the SAT, for college-level mathematics courses, and for the workplace. Applications of Mathematics / Algebra III includes topics such as probability, statistics, linear programming, finance, logarithms, exponential functions, and algebra review in preparation for students' SAT and ACT exams and college placement tests.

Assessment:

Students are evaluated by their performance on independent assignments, teacher-constructed activities, quizzes and tests, and departmental midyear and final exams.

Text and Supplementary Materials:

- 1.) *Algebra 2*; Glencoe/McGraw Hill
- 2.) Teacher-prepared worksheets
- 3.) Graphing calculators

RUBRICS

Rubric 2: Writes Effectively

Category/ Weight	Exemplary 4 Student work:	Goal 3 Student work:	Working Toward Goal 2 Student work:	Needs Support 1-0 Student work:
Purpose X_____	<ul style="list-style-type: none"> Establishes and maintains a clear purpose. Demonstrates an insightful understanding of audience and task. 	<ul style="list-style-type: none"> Establishes and maintains a purpose. Demonstrates an accurate awareness of audience and task. 	<ul style="list-style-type: none"> Establishes a purpose. Demonstrates an awareness of audience and task. 	<ul style="list-style-type: none"> Does not establish a clear purpose. Demonstrates limited/no awareness of audience and task.
Organization X_____	<ul style="list-style-type: none"> Reflects sophisticated organization throughout. Demonstrates logical progression of ideas. Maintains a clear focus. Utilizes effective transitions. 	<ul style="list-style-type: none"> Reflects organization throughout. Demonstrates logical progression of ideas. Maintains a focus. Utilizes transitions. 	<ul style="list-style-type: none"> Reflects some organization throughout. Demonstrates logical progression of ideas at times. Maintains a vague focus. May utilize some ineffective transitions. 	<ul style="list-style-type: none"> Reflects little/no organization. Lacks logical progression of ideas. Maintains little/no focus. Utilizes ineffective or no transitions.
Content X_____	<ul style="list-style-type: none"> Is accurate, explicit, and vivid. Exhibits ideas that are highly developed and enhanced by specific details and examples. 	<ul style="list-style-type: none"> Is accurate and relevant. Exhibits ideas that are developed and supported by details and examples. 	<ul style="list-style-type: none"> May contain some inaccuracies. Exhibits ideas that are partially supported by details and examples. 	<ul style="list-style-type: none"> Is inaccurate and unclear. Exhibits limited/no ideas supported by specific details and examples.
Use of Language X_____	<ul style="list-style-type: none"> Demonstrates excellent use of language. Demonstrates a highly effective use of standard writing that enhances communication. Contains few or no errors. Errors do not detract from meaning. 	<ul style="list-style-type: none"> Demonstrates competent use of language. Demonstrates effective use of standard writing conventions. Contains few errors. Most errors do not detract from meaning. 	<ul style="list-style-type: none"> Demonstrates use of language. Demonstrates use of standard writing conventions. Contains errors that detract from meaning. 	<ul style="list-style-type: none"> Demonstrates limited competency in use of language. Demonstrates limited use of standard writing conventions. Contains errors that make it difficult to determine meaning.

Rubric 3 - Problem Solving through Critical Thinking

Category/Weight	Exemplary 4	Goal 3	Working Toward Goal 2	Needs Support 1-0
Understanding X_____	Student demonstrates clear understanding of the problem and the complexities of the task.	Student demonstrates sufficient understanding of the problem and most of the complexities of the task.	Student demonstrates some understanding of the problem but requires assistance to complete the task.	Student demonstrates limited or no understanding of the fundamental problem after assistance with the task.
Research X_____	Student gathers compelling information from multiple sources including digital, print, and interpersonal.	Student gathers sufficient information from multiple sources including digital, print, and interpersonal.	Student gathers some information from few sources including digital, print, and interpersonal.	Student gathers limited or no information.
Reasoning and Strategies X_____	Student demonstrates strong critical thinking skills to develop a comprehensive plan integrating multiple strategies.	Student demonstrates sufficient critical thinking skills to develop a cohesive plan integrating strategies.	Student demonstrates some critical thinking skills to develop a plan integrating some strategies	Student demonstrates limited or no critical thinking skills and no plan.
Final Product and/or Presentation X_____	Solution shows deep understanding of the problem and its components. Solution shows extensive use of 21st Century Technology Skills.	Solution shows sufficient understanding of the problem and its components. Solution shows sufficient use of 21st Century Technology Skills.	Solution shows some understanding of the problem and its components. Solution shows some use of 21st Century Technology Skills.	Solution shows limited or no understanding of the problem and its components. Solution shows limited or no use of 21st Century Technology Skills.

Rubric 5: Independent Learners and Thinkers

Category/Weight	Exemplary 4	Goal 3	Working Toward Goal 2	Needs Support 1-0
Proposal X_____	Student demonstrates a strong sense of initiative by generating compelling questions, creating uniquely original projects/work.	Student demonstrates initiative by generating appropriate questions, creating original projects/work.	Student demonstrates some initiative by generating questions, creating appropriate projects/work.	Student demonstrates limited or no initiative by generating few questions and creating projects/work.
Independent Research & Development X_____	Student is analytical, insightful, and works independently to reach a solution.	Student is analytical, and works productively to reach a solution.	Student reaches a solution with direction.	Student is unable to reach a solution without consistent assistance.
Presentation of Finished Product X_____	<p>Presentation shows compelling evidence of an independent learner and thinker.</p> <p>Solution shows deep understanding of the problem and its components.</p> <p>Solution shows extensive and appropriate application of 21st Century Skills.</p>	<p>Presentation shows clear evidence of an independent learner and thinker.</p> <p>Solution shows adequate understanding of the problem and its components.</p> <p>Solution shows adequate application of 21st Century Skills.</p>	<p>Presentation shows some evidence of an independent learner and thinker.</p> <p>Solution shows some understanding of the problem and its components.</p> <p>Solution shows some application of 21st Century Skills.</p>	<p>Presentation shows limited or no evidence of an independent learner and thinker.</p> <p>Solution shows limited or no understanding of the problem.</p> <p>Solution shows limited or no application of 21st Century Skills.</p>

TRUMBULL PUBLIC SCHOOLS
TRUMBULL, CONNECTICUT

**CURRICULUM COMMITTEE
MEETING DATES**

2016

January 21, 2016

February 18, 2016

March 17, 2016

April 21, 2016

May 19, 2016

June 9, 2016

[No meeting in July]

August 11, 2016

September 1, 2016

September 22, 2016

October 20, 2016

November 17, 2016

[No meeting in December]