

ACADEMY FOR PERFORMING ARTS



**ACADEMIC PROGRAM GUIDE
2017-2018**

Dear Parents/Guardians and Students:

The Academic Program Guide is designed to help you select an appropriate course of study for the next academic year. Inside you will find course descriptions detailing the contents and requirements for all of the courses offered at the Academy for Performing Arts. In addition, this Guide contains important information regarding academic policies and procedures, including our grading policy, QPA calculation, and graduation requirements. Please look over this guide carefully, and feel free to contact me or your child's school counselor any questions or concerns you may have.

Sincerely,

Kelly Douglas-Jackson

Principal
Academy for Performing Arts

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SCHEDULING

As outlined in our curriculum, students are placed in their appropriate academic classes by their school counselor. Students who are advanced in Mathematics or World Language will meet with their school counselor to discuss placement.

SCHEDULE CHANGES

Schedule changes will **not** be made for reasons of convenience or because of teacher preference. Only changes which are educationally beneficial to the student will be considered.

Scheduling changes will **not** be considered for any of the following reasons:

1. Course content or standards differing from student expectations.
2. Inability of a student to relate well to a given teacher.
3. Dropping a course in order to lighten one's load.
4. Participation in extra-curricular activities and/or athletics.

DROP/ADD PERIOD

Students have two weeks from the start of a semester to request a schedule change. All requests must be made in writing to the student's school counselor and will only be made if the change is educationally beneficial to the student.

ADVANCED PLACEMENT (AP) COURSE REQUIREMENTS

Advanced Placement (AP) courses are college-level courses that give students the opportunity to earn college credit or placement while still in high school. Due to the academic rigor of these courses, enrollment in an AP course has the following eligibility requirements:

1. Students **must** attend an AP Information Session for the course(s) of their choice in the spring of the preceding year.
2. Students and parents/guardians **must** read and sign a contract outlining course policies and expectations.
3. Students **must** have earned a grade of 85 or above in all prerequisite courses or have obtained a recommendation from the subject area instructor.

All AP courses are designed for those wishing to work diligently in order to prepare for the AP Exam administered by the College Board in May.

GRADING POLICY

Grades may be interpreted as follows:

A	90-100
B	80-89
C	70-79
D	65-69
F	64 or below

For full year courses, each marking period grade counts for 20% of the student's final course grade. Midterm and final examinations each count for 10% of the final course grade.

For semester courses, each marking period grade counts for 40% of the student's final course grade. The final semester examination counts for 20% of the final course grade.

QUALITY POINT AVERAGE

A Quality Point Average (QPA) will be calculated for each student. The final course grade is multiplied by the number of credits received for the course. The total credits and the total quality points are then divided to produce the QPA as in the example below:

Subject	Grade	Credits	Quality Points
Vocational	95	10	950
English	90	5	450
Social Studies	94	5	470
Math	87	5	435
Science	90	6	540
World Language	90	5	450
Fitness	98	1.25	122.5
Health	99	1.25	123.75
Total		38.5	3541.25

$$3541.25 \quad / \quad 38.5 = 91.9805$$

QPA is calculated only when a course has been completed.

The QPA appearing on the high school transcript is **unweighted** and includes all subjects with the exception of repeated coursework. An official QPA can be obtained from the student's school counselor.

FAILURES

Students that fail a course that is required for graduation must attend summer school and successfully complete the course before the next course in that subject area's sequence can be taken. It is the student's responsibility to find and enroll in an approved equivalent of the failed course.

The transcript will show the student's failing grade in the course, which will be included in the QPA. The transcript will also show that the student repeated the class and the grade that was earned. Grades earned in repeated coursework are not included in the QPA.

ACADEMIC PROBATION

Students whose work falls below acceptable standards of achievement (70%) may be placed on academic probation. A conference with a school administrator, counselor, parent(s), and student may be required so that the academic expectations of the Academy for Performing Arts may be reviewed. Options to help a student, such as peer tutoring, individualized instructional plans, or extra assistance from the faculty may be implemented. The school administrator may also take action on a case-by-case basis, including limiting a student's co-curricular options and participation in extra-curricular activities.

GRADUATION REQUIREMENTS

Students must earn 120 credits to graduate with a high school diploma endorsed by the New Jersey Department of Education. The **required** coursework for Academy for Performing Arts is as follows:

Subject Area	Freshmen Year	Sophomore Year	Junior Year	Senior Year @ Kean University		
				Dance	Theatre	Tech Theatre
Vocational Education 4 years	Dance I <i>or</i> Theatre I <i>or</i> Tech Theatre I	Dance II <i>or</i> Theatre II <i>or</i> Tech Theatre II	Dance III <i>or</i> Theatre III <i>or</i> Tech Theatre III	Technique & Theory of Ballet and Technique & Theory of Modern and Dance Styles and Technique & Theory of Jazz	Advanced Scene Study and Plays: On Page & On Stage and Performer's Presence and Improvisation and Dance Musical Theatre	TBD
English 4 years	World Literature	American Literature	British Literature	College Composition and Research & Technology		
Mathematics* 4 years	Combined Algebra	Geometry/ Trigonometry	Math Analysis	One Math Course		
Science 4 years	Biology and Scientific Inquiry & Analysis	Chemistry	Physics	One Science Course		
Social Studies 3 years	World History	United States History I	United States History II			
World Language* 4 years	Spanish I	Spanish II	Spanish III			
Fitness 4 years	Fitness I	Fitness II	Fitness III		Physical Education Elective	Physical Education Elective
Health 4 years	Health I	Health II	Health III	First Aid/Accident Prevention		
Financial Literacy		Financial Literacy				

*Initial placement determined by UCVTS.

AWARDS AND HONORS

Honor Roll: Awarded each Marking Period to students earning an 80 or above in all subjects.

High Honor Roll: Awarded each Marking Period to students earning a 90 or above in all subjects.

National Honor Society: Open to junior and senior students who meet the Society's standards for academics, character, leadership, and service. Students must have a QPA of 92 or above in order to be considered.

Spanish Honor Society: Open to junior and senior students earning a 92 or above in Spanish, and an overall QPA of 85 or above. Students must meet the Society's standards for academics, character, leadership, and service.

National Honor Society for Dance Arts: Open to junior dance students who have an average of 92 in Dance for freshman and sophomore years combined. Students must meet the Society's standards for attendance, work ethic, character, and professionalism within dance class.

International Thespian Society: Open to junior theatre students who have a final average of 92 or above in Theatre for freshman and sophomore years. Students must meet the Society's standards for attendance, work ethic, character, and professionalism.

ARTICULATION AGREEMENT

The Academy for Performing Arts has an articulation agreement with Kean University whereby students will spend their high school senior year at Kean University taking a full freshman college course load which includes a concentration in their Performing Arts major.

VOCATIONAL EDUCATION

Courses labeled with an asterisk (*) are offered at Kean University and will appear as such on the student's transcript.

DANCE PROGRAM

Dance Program Overview

Ballet Technique I, II, III

Modern Technique I, II, III

Jazz Technique I, II, III

Movement Improvisation/Choreography I, II, III

Dance Lab-Repertoire

Anatomy for the Dancer

Dance History I: World Dance Forms

Dance History II: The Evolution of Ballet

Dance History III: 20th Century Modern Dance and Jazz Forms

Body Maintenance

- Injury Prevention and Core Strengthening, Pilates and Yoga
- Muscles and Stretching, Stem of The Aplomb, Pilates and Yoga
- The Control Center, Turnout, The Knee, The Foot, Pilates and Yoga

Dance Production

Carolyn Dorfman Dance Company Artist-In-Residency Program

Kean University Guest Artist Master Classes

In House and Main Stage Performances

Course Title: Dance I, II, & III

Course Number: 01_1101_035; 01_2101_035; 01_3101_035

Grade Level: 9, 10, 11

Credits: 10 per year

The goal of the Dance program is to equip the student with saleable dance skills, performance techniques, attitudes, history and the scientific base of knowledge necessary for success in this field. It should therefore be known that this is a college preparatory program. It is also the goal of the program to:

1. Develop personal creativity and self-discipline.
2. Develop the awareness of the strong links between the fine arts, music, language, theatre, dance, and academics.
3. Develop the ability to respond fully to and sensitively to artistic stimulation.
4. Provide a medium for exploring the customs, attitudes, history of world culture.

Through both studying the theories and practical application of technique in dance, students prepare for a deeper understanding and appreciation of performing arts as well as an appreciation for a career in dance and/or other related fields. The program is designed to incorporate both artistic and intellectual growth. Included are literary, historical, and other interdisciplinary aspects that will prepare the student for a well-rounded future in performing arts.

In promoting vocational success, the program requires hands on experience in the field of dance where students will be exposed to Master Classes lead by Carolyn Dorfman and Company Members through the Artist-In-Residence Program with Carolyn Dorfman Dance Company. Students will apply what they have learned in daily technique class towards experiences, workshops and master classes with Carolyn Dorfman. In addition students will be able to apply what they have learned in the classroom to real concert dance performance experiences. They will do this through learning CDDC Repertoire from Carolyn Dorfman and

Company Members and be expected to apply this knowledge in a main stage performance setting.

Course Title: Technique and Theory of Ballet[#]

Course Number: 01_DANC2110

Grade Level: 12

Credits: 4

Exploration of the conceptual and experiential development of classical ballet, with particular emphasis on technique and skill.

Course Title: Technique and Theory of Modern Dance[#]

Course Number: 01_DANC2120

Grade Level: 12

Credits: 2

Exploration of conceptual and experiential development of modern dance, with particular emphasis on technique and skill.

Course Title: Technique and Theory of Jazz Dance[#]

Course Number: 01_DANC2130

Grade Level: 12

Credits: 2

Exploration of conceptual and experiential development of jazz dance, with particular emphasis on technique and skill.

Course Title: Dance Styles[#]

Course Number: 01_DANC2150

Grade Level: 12

Credits: 2

Students will develop the technical and artistic skills necessary to recreate and perform historic and contemporary repertoire by well-known choreographers, integrating these forms into personal representations of choreography.

THEATRE PROGRAM

Theatre Program Overview: The courses are comprised of the following distinct aspects of studies in Theatre:

- **Acting Technique** includes the ongoing and rigorous study of basic vocal and movement techniques for the actor. The unit(s) culminates with public performances to help actors apply their technique while gaining a sense of audience/performer relationship. Through daily exercises, the student will continue using proper physical and vocal warm-ups. These are designed to cultivate openness, spontaneity and body awareness. The student will learn the techniques of vocal variation and how to support the breath during dramatic speeches and scene work. Further, they will develop an acute sense of stage worthy blocking and movement to strengthen their power on stage.
- **Dramatic Theory** includes becoming proficient in analyzing and critiquing drama in reading, acting preparation and live, videotaped or classroom performances. The study of theory helps students more fully understand and realize their acting techniques.
- **Theatre History** will continue developing student awareness of theatre's timeline and the significance of the relationship of global history to theatrical genres. Students should be able to demonstrate, by means of written reports and presentations, knowledge of specific elements of the theatrical period(s) studied. This knowledge would include, but not be limited to, the impact of social/cultural events and forces on the theatre, the emergence of representative directors, playwrights and designers, the development of theatrical spaces, and technical conventions of the period(s).
- **Technical Theatre & Theatre Business** will introduce students to the basics of Technical Theatre and Stage Managements. The students will demonstrate the basic principles of technical theatre – safety, types of stages, stage layout and terminology. They will learn the roles of stage manager, house manager, director, technical director and producer, as well as the basic techniques and styles of costume and makeup design.

Course Title: Theatre I
Grade Level: 9

Course Number: 01_1201_035
Credits: 10

This course is designed to introduce you to the vast world of the theatre. The main focus of Theatre I is the acting process and becoming aware of your physical, emotional, and vocal expressions. Self-expression is explored through characters in participatory exercises, theatre games, scene work, monologues, improvisations, movement, and vocal work. In order to develop a character, play structure and character analysis will be covered. Concepts on the basics of technical theatre are taught by learning stage geography, common theatre terminology, basic design skills, and the process of mounting a production. You will begin theatre history learning about the Greeks, Romans, Dark Ages and Renaissance. You will learn play structure and how to write monologues and One-Act plays.

Course Title: Theatre II
Grade Level: 10

Course Number: 01_2201_035
Credits: 10

The study and pursuit of theatre, whether professionally or academically, is an ongoing and constantly changing journey that will last a lifetime. This course continues and expands on aspects of theatre that you were introduced to in Theatre I. Particular attention will focus on developing your actor's "toolbox"; those skills that will begin to define and refine your unique expression as an actor. We will be exploring self-expression through characters both classical and contemporary monologues, as well as scene work. Theatre history will continue with Realism thru Avant Garde, and the acting styles will be practiced from those time periods. Directing is introduced and students direct two scenes, one realistic piece and one avant garde piece. And, because theatre is a collaborative venture and not just a performance art, the elements of theatrical design, construction and production will also be studied.

Course Title: Theatre III
Grade Level: 11

Course Number: 01_3201_035
Credits: 10

This course continues and expands on aspects of theatre that you were introduced to in Theatre II. We will be delving deeper in acting theory and styles based on theorists Lee Strasberg, Sanford Meisner, Stella Adler and Uta Hagan. The study of theatre history and the importance of theatre to society will also continue with Modern Theatre and American Theatre being our main focus. Dramaturgy is introduced and each student will be a "dramaturg" for a classic play ending with a presenting that they visualized and directed.

Course Title: Advanced Scene Study[#]
Grade Level: 12

Course Number: 01_THE1150
Credits: 3

Utilizing American plays, explore the process of crafting focused and truthful onstage relationships, developing rehearsal techniques, focusing on textual analysis, observation, personalization, activation, and moment-to-moment realization of character and circumstance.

Course Title: Performer's Presence I[#]
Grade Level: 12

Course Number: 01_THE1160
Credits: 1

Theatre elective Laboratory experience where students will work on developing stage presence by expanding their creativity and spontaneity skills. Based in improvisation and ensemble exercises, focus on expanding personal expression in both the physical body and voice.

Course Title: Plays, On Page & On Stage[#]
Grade Level: 12

Course Number: 01_ID2701
Credits: 1

Examination of theatrical scripts in context of their realization in production. Purchase of theatre tickets required.

Course Title: Dance in Musical Theatre[#]

Grade Level: 12

Course Number: 01_DANC2140

Credits: 1

Conceptual and experiential exploration of the impact of jazz, ballet, tap, and modern dance styles within the context of the history of the musical theatre, with particular attention to the contributions of individual pioneering musical theatre choreographers.

Course Title: Improvisation[#]

Grade Level: 12

Course Number: 01_THE3140

Credits: 3

Improvisational stage techniques, focusing primarily on acting techniques for unscripted performance.

TECHNICAL THEATRE PROGRAM

Technical Theatre Program Overview: Technical Theatre consists of stagecraft, theater management, scenic design, lighting design, sound design, and costume design. Students will begin their studies with a strong foundation in theatre history as well as design history and theory. Through the use of hand and computer drafting techniques, they will create scenic designs for the stage. Theory will be put into practice as students learn hands-on scenic construction techniques. Students will learn to create a lighting plot and to hang and focus lights and they will program lights on APA's two Ion ETC lighting consoles. Students will have the opportunity to mix both live and recorded sound in APA's Black Box Theatre and in our own recording studio. Guest artists will introduce the principals of costume design and construction. In their fourth year, students in APA's Technical Theatre program will attend Kean University, where they will have the opportunity to choose an area of theatrical design for focused study.

Course Title: Theatre History I

Grade Level: 9

Course Number: 01_1302_035

Credits: 2.5

Course Title: Lighting

Grade Level: 9

Course Number: 01_1303_035

Credits: 2.5

Course Title: Set Design

Grade Level: 9

Course Number: 01_1304_035

Credits: 2.5

Course Title: Sound for the Theatre

Grade Level: 9

Course Number: 01_1305_035

Credits: 2.5

Course Title: Theatre History II

Grade Level: 10

Course Number: 01_2304_035

Credits: 2.5

Course Title: Stage Management I

Grade Level: 10

Course Number: 01_2305_035

Credits: 2.5

Course Title: CAD for the Theatre

Grade Level: 10

Course Number: 01_2306_035

Credits: 2.5

Course Title: Costuming

Grade Level: 10

Course Number: 01_2307_035

Credits: 2.5

Course Title: Theatre History III

Grade Level: 11

Course Number: 01_3301_035

Credits: 2.5

Course Title: Stage Management II

Grade Level: 11

Course Number: 01_3302_035

Credits: 2.5

Course Title: The Business of Theatre

Grade Level: 11

Course Number: 01_3303_035

Credits: 2.5

Course Title: Technical Theatre Project

Grade Level: 11

Course Number: 01_3304_035

Credits: 2.5

INTERDISCIPLINARY VOCATIONAL COURSES

Course Title: Musical Theatre Seminar

Grade Level: 10, 11

Course Number: 01_5001_035

Credits: 35 Hour Seminar

This course is designed to present basic theoretic principles of music so the student can learn to read and sing music with healthy vocal technique and expressive interpretation. Throughout the course, the student makes music performance of some form of artistic expression. The student is constantly developing and refining aural literacy skills by focusing on pitch accuracy and intonation. The very act of music-making requires collaborative skill and some group problem-solving. Students must listen to themselves as well as to each other and make adjustments in pitch, intonation, tempo, articulation, diction and dynamics in order to create the desired music outcome. The interactive nature of this art emphasizes learning through creative doing.

Course Title: Technical Theatre Lab I for Theatre & Dance Majors

Grade Level: 10

Course Number: 01_2202_035

01_3103_035

Credits: 1.25

This is an introductory course for students of technical theatre. As such, it asks the students to become familiar with the technical roles of the theatre, the principles of stage lighting, sound, set/stage design and further, it begins the process of familiarizing the students with the mechanical and technical skills involved in each of these areas of the theatre.

Course Title: Technical Theatre Lab I for Majors

Grade Level: 10

Course Number: 01_2303_035

Credits: 1.25

This hands-on class is devoted to the understanding and implementation of tools, design, and construction in theatre. Students will take the principles that they are learning in their Technical Theatre classes and implement new strategies in the design and construction of sets, lighting, and sound for APA productions. Through the safe and effective utilization of tools and appropriate collaboration, students can discover rewarding career pathways in technical theatre.

Course Title: Technical Theatre Lab II for Theatre Majors

Grade Level: 11

Course Number: 01_3202_035

Credits: 1.25

Pre-Requisite: Successful completion of Technical Theatre I

This is a second year course of study following Tech Theatre I. It allows the students to work on more complex technical aspects of design and function and, ultimately, to become department and Crew Chiefs/Designers for actual school or community productions.

ENGLISH

#Courses labeled with an asterisk () are offered at Kean University and will appear as such on the student's transcript.*

Course Title: World Literature

Grade Level: 9

Course Number: 02_1001_035

Credits: 5

The World Literature course is designed to expose students to a variety of countries and forms of literature.

While participating in individual and class assignments, students will have an opportunity to explore a multitude of cultures. This experience is further enhanced by joint projects and activities which occur between the World History and World Literature classes. A large emphasis is placed on common themes to help students understand and appreciate the similar human conditions that exist in all cultures. These themes include the struggle with intolerance, love, coping with death, metamorphoses, and communion with nature. Many of the selections read and discussed in class come from China, India, Africa, Egypt, the Middle East, Greece, Rome, and Europe during the Middle Ages and Renaissance period. Types of literature covered include the novel, epic poem, poetry, critical essays, editorials, short stories, drama/plays, and several classical selections. In addition to reading, students will be required to write several different forms of literature, essays, and one major research paper.

Course Title: American Literature

Course Number: 02_2001_035

Grade Level: 10

Credits: 5

Pre-Requisite: Successful completion of World Literature

This course will focus on the literature of America, from early Native American myths, through the Age of Exploration, the American Revolution, the American Renaissance, and the Civil War era and into contemporary literature. Studying these periods in American Literature is crucial to understanding the origins of America and what makes America different from other nations. These writings define the American character and the American dream in ways that continue to influence a nation's culture. The writing of the American community of writers will be studied in their historical context and in their aspects of enduring merit. Modern-day society and its value systems can be better understood within the frame of reference that American literature provides.

Course Title: British Literature

Course Number: 02_3001_035

Grade Level: 11

Credits: 5

Pre-Requisite: Successful completion of American Literature

This course will focus on the literature of England. Studying the literature of the country from which much of our early government, customs, and culture derived will simultaneously give students a greater appreciation of different cultural, social and political viewpoints and a greater understanding of how our own society, culture, government and literature developed from, as well as alongside, these. To enhance this learning experience, students will make broad connections through the use of interdisciplinary curricula, especially with the European History curriculum. The course will also draw connections to parallel literary and historical periods in American history and literature with which the students are already familiar from previous coursework. Critical thinking, writing, grammar, literary analysis, technology, and study skills will all be a part of the British literature course. Through an emphasis on writing, questioning, and reading critically, students will develop the communication and analytical skills necessary to succeed in our world.

Course Title: College Composition[#]

Course Number: 02_ENG1030

Grade Level: 12

Credits: 3

Development of flexible processes for composing writing to meet academic purposes across the curriculum.

Course Title: Research and Technology[#]

Course Number: 02_GE2025

Grade Level: 12

Credits: 3

Introduction to the research process; preparing a formal research paper and an oral presentation with an emphasis on use of library resources and multi-disciplinary approaches to design, investigate, and report research activities.

SOCIAL STUDIES

Course Title: World History
Grade Level: 9

Course Number: 03_1001_035
Credits: 5

This course explores the world history, economics, and geography from 1450 C.E. to the present. Geographic influences on history will be explored, as will political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. Noteworthy people and events of the nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues. The course utilizes various elements of technology and interdisciplinary philosophies to meet the needs of the students as well as the goals of the instructor.

Course Title: United States History I
Grade Level: 10

Course Number: 03_2001_035
Credits: 5

Pre-Requisite: Successful completion of World History

This course involves the study of the development of the North American continent from the late 16th century through the late 19th century. The course analyzes the political, economic, and social factors that led to the creation of modern democracy and the struggle to keep this grand experiment alive. Specific topics that are discussed start with the arrival of the British, Spanish, and French in the 1500's, their interaction with the native populations, Colonial America, the Revolutionary War, the writing of the United States Constitution, the Civil War, Slavery, and Industrial Growth in America. The course utilizes various elements of technology and interdisciplinary philosophies to meet the needs of the students as well as the goals of the instructor.

Course Title: United States History II
Grade Level: 11

Course Number: 03_3001_035
Credits: 5

Pre-Requisite: Successful completion of United States History I

In this course, students will study the social, political, and economic characteristics of the United States from 1880 to the present. Topics will include American Imperialism, Progressivism, the United States at War, the Great Depression, the Sixties, and the Vietnam Conflict, among others. Students will take part in a variety of activities geared to accommodate different learning styles. These activities include simulations, writing exercises, cooperative learning, and visual and audible expression.

MATHEMATICS

#Courses labeled with an asterisk () are offered at Kean University and will appear as such on the student's transcript.*

Course Title: Combined Algebra
Grade Level: as determined by UCVTS Placement Test

Course Number: 04_1001_035
Credits: 5

Combined Algebra is an in-depth coverage of all topics in a traditional Algebra I course and most topics in a traditional Algebra II course. These topics include the study of linear equations, absolute value equations, quadratic equations and parabolas, functions, basic matrix operations, linear inequalities, systems of equations and inequalities, polynomial and rational equations, and powers, exponents, and radicals. This is a rigorous course with an emphasis on problem solving, working collaboratively, and communicating mathematically in both written and oral form.

Course Title: Geometry/Trigonometry
Grade Level: as determined by UCVTS Placement Test

Course Number: 04_2001_035
Credits: 5

Pre-Requisite: Successful completion of Combined Algebra or placement test results

Geometry/Trigonometry is an in-depth coverage of plane and solid geometry with additional study of selected topics from plane trigonometry and discrete mathematics. Geometry topics include the study of

reasoning and logic, proofs, constructions, lines, triangles, polygons, circles, similarity, congruence, transformations, planar and space measurements. Trigonometry topics include trigonometric ratios as defined for the right triangle and unit circle, reciprocal, quotient and Pythagorean identities, inverse trigonometric functions, Law of Sines and Law of Cosines. Discrete mathematics topics include basic principles of iteration, recursion, and mathematical induction, which are used to solve combinatorial and algorithmic problems. Geometry/Trigonometry is a rigorous course with an emphasis on problem solving, working collaboratively, and communicating mathematically in both written and oral form. Appropriate computer software as well as educational media is used to introduce and reinforce concepts visually.

Course Title: Math Analysis

Course Number: 04_3001_035

Grade Level: as determined by UCVTS Placement Test

Credits: 5

Pre-Requisite: Successful completion of Geometry/Trigonometry or placement test results

Math Analysis is an in-depth coverage of advanced algebra as well as the rigorous study of pre-calculus. Topics include real numbers, exponents and radicals, polynomials and factoring, fractional expressions, solving equations and inequalities, functions and their graphs, polynomial and rational functions, complex numbers, exponential and logarithmic functions, trigonometric functions, analytic trigonometry, analytic geometry/conic sections, series and sequences, probability, statistics and data analysis, linear algebra and matrix mathematics and determinants. Connections between algebra, geometry, and trigonometry will be made. These topics form the foundation for the successful study of calculus. Math Analysis is a rigorous course with an emphasis on developing problem-solving and reasoning abilities, the use of graphing calculators, communicating mathematically in both written and oral form, and solving real life problems.

Course Title: Calculus

Course Number: 04_4001_999

Grade Level: as determined by UCVTS Placement Test

Credits: 5

Pre-Requisite: Successful completion of Math Analysis

The Calculus course is an alternative to the AP Calculus I/AB course. It is designed specifically for students not planning on taking the AP Calculus Exam. However, most of the topics covered in the college-level AP course will also be covered here at a slower pace. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. Topics covered include the initial review of pre-calculus topics, limits, differentiation and its applications, and integration and its applications. There is an emphasis on problem solving, working collaboratively, and communicating mathematically in both written and oral form. Even though this is not an Advanced Placement course, students are still expected to spend a considerable amount of time outside of class on homework preparation and daily studying.

Course Title: AP Calculus I/AB

Course Number: 04_4002_999

Grade Level: as determined by UCVTS Placement Test

Credits: 5

Pre-Requisite: 85 or higher in Math Analysis or Math Analysis teacher recommendation

AP Calculus I/AB is a rigorous college-level course which emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. Topics covered include the initial review of pre-calculus topics, limits, differentiation and its applications, and integration and its applications. There is an emphasis on problem solving, working collaboratively, and communicating mathematically in both written and oral form. Since this is an Advanced Placement college-level course, students are expected to spend a considerable amount of time outside of class in homework preparation and daily studying.

Course Title: AP Calculus II/BC

Course Number: 04_5001_999

Grade Level: as determined by UCVTS Placement Test

Credits: 5

Pre-Requisite: 85 or higher in AP Calculus I/AB or AP Calculus I/AB teacher recommendation

AP Calculus II/BC is a rigorous college level course that emphasizes a multi-representational approach to calculus. Students learn to express mathematical concepts geometrically, numerically, analytically, and verbally. As a continuation of Calculus I, topics covered in this class include applications and techniques of integration, L'Hopitals' Rule, improper integrals, an introduction to differential equations, infinite series and sequences, conic sections, parametric and polar equations. Students who enroll in Calculus II will be expected to participate in a collaborative learning environment. As in Calculus I, problem solving and mathematical communication in written and oral form are an essential component of this course. All students are expected to spend considerable time outside of class in homework preparation and daily study.

Course Title: Algebra for College Students[#]
Grade Level: 12

Course Number: 04_MATH1000
Credits: 3

Rational Expressions, Radical and Exponential Expressions. Quadratic, rational and radical equations and inequalities Systems of Equations. Properties of Functions and their Graphs, polynomial functions, inverse functions. Conic sections. Binomial Theorem.

Course Title: Foundations of Mathematics[#]
Grade Level: 12

Course Number: 04_MATH1010
Credits: 3

An introduction to mathematical reasoning including problem-solving strategies sets and set operations, logic, geometry, and statistics.

Course Title: Statistics[#]
Grade Level: 12

Course Number: 04_MATH1016
Credits: 3

Descriptive and inferential statistics; graphic treatment of data, characteristics of distributions, statistical models, correlation, regression, estimation, and hypothesis testing.

Course Title: Problem Solving in Mathematics[#]
Grade Level: 12

Course Number: 04_MATH1030
Credits: 3

Development and application of problem solving strategies to a variety of problems within and outside of mathematics making connections between mathematics and other content areas. Numerous and varied experiences with problem solving as a method of inquiry and applications.

Course Title: Pre-Calculus[#]
Grade Level: 12

Course Number: 04_MATH1054
Credits: 3

Exponential and logarithmic functions. Trigonometric functions with emphasis on trigonometric identities and trigonometric analysis. Complex numbers, polar coordinates, plane vectors and trigonometric forms of complex numbers. Arithmetic and geometric sequences and series. Problem solving methods. Students will be required to acquire a specified graphing calculator.

Course Title: Calculus I[#]
Grade Level: 12

Course Number: 04_MATH2411
Credits: 3

Pre-Requisite: Students scheduled for course based on teacher recommendation ONLY.

Functions, limits and continuity, differentiation of algebraic and trigonometric functions, tangent and normal lines, Newton's method, optimization and related rate problems. Applications to the physical, biological and managerial sciences.

Course Title: Calculus II[#]
Grade Level: 12

Course Number: 04_MATH2412
Credits: 3

Pre-Requisite: Students scheduled for course based on teacher recommendation ONLY.

Antiderivatives, definite integrals, integration of algebraic and transcendental functions, numerical integration, elementary differential equations. Area, volume, arc length, surface area. Applications to the physical, biological and managerial sciences. Computer laboratory assignments.

SCIENCE

#Courses labeled with an asterisk () are offered at Kean University and will appear as such on the student's transcript.*

Course Title: Biology
Grade Level: 9

Course Number: 05_1001_035
Credits: 6

Biology gives students the opportunity to explore, question, and analyze the many intricacies of life. The purpose of this course is to provide a detailed introduction to the major themes and concepts in biology. Students will investigate biology at four fundamental levels: molecular, cellular, organismal, and population biology. Experiments will emphasize the scientific method. Students will be required to think creatively and make critical evaluations of scientific work. Students will also develop the fundamental skills of problem-solving, concise writing expressing original ideas, reading critically, and public speaking.

Course Title: Scientific Inquiry and Analysis
Grade Level: 9

Course Number: 05_1002_035
Credits: 2.5

Scientific Inquiry and Analysis is an interdisciplinary course. The course emphasizes development of skills that are common to the various disciplines of science. Students will obtain proficiency in the use of graphing calculators and computers within scientific contexts. In particular, students will utilize technology for scientific data acquisition, mathematical analysis of data, and presentation of data obtained from a wide array of physical, biological, and social science contexts. Skills and procedures that are common to all laboratory sciences will be highlighted such as the scientific method, systems of measurement, unit conversions, significant figures, error analysis, laboratory reports, measurement tools and techniques, and experimental design. Additionally, the course will provide an introduction to the core concepts of physics and chemistry. Students will practice and apply a variety of methods for the collection, organization, description, and presentation of scientific data. In particular, students will use various mathematical models and techniques such as iteration, recursion, and the application of probability and statistics, to solve and analyze problems arising within the context of the sciences. The course will culminate in a student-designed, independent research project, through which students will apply skills and techniques learned in this course to analyze a real-world question.

Course Title: Chemistry
Grade Level: 10

Course Number: 05_2001_035
Credits: 6

Pre-Requisite: Successful completion of Biology and Scientific Inquiry and Analysis

Chemistry is a rigorous course intended to give students a well-rounded background in general chemistry. This course investigates a wide range of general chemistry topics including: atomic structure, the periodic table, bonding, reactions, stoichiometry, gas laws, kinetics, and nuclear chemistry. This class focuses on both qualitative and quantitative analysis of these topics, so students are expected to have the necessary Algebra skills. Whenever possible, this course applies theoretical concepts to the real world. Chemistry is a laboratory class—typically around twenty experiments are properly recorded in the students' laboratory notebook. Labs include problem solving and cooperative group work, since these skills are essential for becoming successful in any field of work. Students use our computer data acquisition system as well as other technologies to collect, analyze, and present experimental data.

Course Title: Physics
Grade Level: 11

Course Number: 05_3001_035
Credits: 6

Pre-Requisite: Successful completion of Chemistry

Physics is an in-depth, rigorous course in which students study the behavior of the physical world. The course is designed to help students develop a broad background in general physics. Students will learn about Mechanics (motion, forces, and energy), Thermodynamics, Electricity and Magnetism, Waves, and Optics. Additional topics will be investigated as time permits. Physics emphasizes the development of reasoning and problem-solving abilities. Students will routinely utilize technology such as graphing calculators and computers for data collection and analysis, both in the classroom and in the laboratory. Hands-on laboratory experience is a fundamental part of the course, with algebra and trigonometry used extensively to analyze data. Students will learn to communicate scientifically and mathematically, in both written and oral forms, while investigating real-life phenomena.

Course Title: Principles of Biology[#]
Grade Level: 12

Course Number: 05_BIO1000
Credits: 4

The course introduces the student to the nature of living forms, their interdependencies, and their adjustments to their physical environment. The fundamentals of structure and function dealt with in such primary processes as respiration, digestion, circulation, excretion, the control systems, reproduction, heredity and variation of biological form through time.

Course Title: Introduction to Astronomy[#]
Grade Level: 12

Course Number: 05_ASTR1100
Credits: 4

A foundation for a better understanding of the components, distances, and structures of the universe. The tools, methods, and problems of the astronomer will be examined along with the presentation of past and present concepts regarding planetary and stellar systems, with an emphasis on how astronomical knowledge is obtained.

Course Title: Chemistry I[#]
Grade Level: 12

Course Number: 05_CHEM1083
Credits: 4

Pre-Requisite: Successful completion of or concurrent enrollment in Pre-Calculus

A thorough discussion of the fundamental principles of general and inorganic chemistry such as atomic structure, ionic and covalent bonding, chemical calculation, thermodynamics and gases. Mathematical relationships and problem solving are stressed. It is essential that the student have competence in elementary algebra.

Course Title: Introduction to Geology[#]
Grade Level: 12

Course Number: 05_GEOL1200
Credits: 4

Basic principles and processes of geology. Minerals, rocks, erosion and deposition, surface and groundwater, earthquakes, oceans, geologic time, and fossils. Emphasis on the historical geologic development of the North American continent, including interpreting its rocks and life forms.

Course Title: General Physics I[#]
Grade Level: 12

Course Number: 05_PHYS2091
Credits: 4

Pre-Requisite: Successful completion of or concurrent enrollment in Pre-Calculus

Mechanics, wave motion, and sound. Phys 2091/2092 is an algebra-trigonometry based sequence designed to give the student a general understanding of the laws and principles of physics.

Course Title: Chemical Systems I[#]
Grade Level: 12

Course Number: 05_STME1401
Credits: 4

Co-Requisite: Must be taken with STME 1403

A thorough discussion of the fundamental principles of chemistry including the atomic structure, ionic and covalent bonding, chemical calculations, thermodynamics and gases. Mathematical relationships and problem-solving are stressed. Integrated laboratory will include advanced versions of classical experiments and an introduction to modern instrumentation.

Course Title: Mathematics & Computational Methods of Science I# **Course Number:** 05_STME1403
Grade Level: 12 **Credits:** 4
Co-Requisite: Must be taken with STME 1401

Turing machines and artificial life, introduction to PERL programming, data structures and algorithms for biology, searching gene banks, introduction to the differential calculus with emphasis on the physical interpretation of the derivative, formulation of simple problem taken from chemistry and biology.

Course Title: Living Systems# **Course Number:** 05_STME2601
Grade Level: 12 **Credits:** 4

Introduction to the origin, organization, and function of living biological systems with mathematical applications and analysis.

WORLD LANGUAGE

Course Title: Spanish I **Course Number:** 06_1001_999
Grade Level: 9 **Credits:** 5

This course serves as an introduction to formal language study. Because language learning is a cumulative and cultural experience, the focus of the first level language course is to assist the student in establishing a foundation that he or she may build upon as language study continues. Interest in Hispanic culture will be stimulated by the study of culture, which provides a better understanding of the life, customs and speech of the people.

Course Title: Spanish II **Course Number:** 06_2001_999
Grade Level: as determined by UCVTS Placement Test **Credits:** 5
Pre-Requisite: Successful completion of Spanish I or placement test results

This intermediate course expands upon the foundations of Spanish 1 continuing the same communicative approach to further develop skills in listening, understanding, speaking, reading and writing of the Spanish language. Activities are used to expand interpersonal communication as well as interpretation and presentation skills. The course includes cultural experiences that allow students to expand their understanding of the Spanish culture through its products and practices.

Course Title: Spanish III **Course Number:** 06_3001_999
Grade Level: as determined by UCVTS Placement Test **Credits:** 5
Pre-Requisite: Successful completion of Spanish II or placement test results

This course is designed to continue the communicative approach and objectives of levels I and II, as well as provide for a more in depth study of the structure of the Spanish language. Students will become more proficient in interpersonal communication, interpretation and presentation skills. Cultural experiences are expanded to include more reading of authentic realia.

Course Title: Spanish IV **Course Number:** 06_4001_999
Grade Level: as determined by UCVTS Placement Test **Credits:** 5
Pre-Requisite: Successful completion of Spanish III

This course is designed to provide the student with a more in depth study of the Spanish language and culture.

It will continue the same communicative approach but will focus on the more difficult nuances of the language and will include more reading than previous levels. Cultural experiences will be expanded to include a more in-depth study of the history, literature, art, economics and social issues of the culture. Students will use the language to make connections on topics they have learned in other core content areas. Instruction, as well as student participation, is exclusively in the Spanish language.

Course Title: AP Spanish Language and Culture

Course Number: 06_5001_999

Grade Level: as determined by UCVTS Placement Test

Credits: 5

Pre-Requisite: 85 or higher in Spanish IV or Spanish IV teacher recommendation

The AP Spanish Language course is a rigorous course of study that is equivalent to a college level course. The fundamental objective of this course is for students to achieve a high level of capability in speaking, writing, reading and listening. Since language and culture are inextricably bound together, cultural understanding should be developed along with these four language skills. Through the year different methods and strategies will be used to practice and develop the four skills. This class is conducted entirely in Spanish and students are encouraged to participate in all classroom activities using Spanish. Students will be exposed to all kinds of materials that will help them to reinforce and expand their knowledge of Spanish. This course offers a large variety of performance options such as dialogues, debates, presentations, and interviews in which students will demonstrate their abilities to communicate proficiently on topics of personal, academic or social nature.

Course Title: AP Spanish Literature and Culture

Course Number: 06_5002_999

Grade Level: as determined by UCVTS Placement Test

Credits: 5

Pre-Requisite: 85 or higher in Spanish IV or Spanish IV teacher recommendation

The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students continue to develop proficiencies across the full range of the modes of communication (interpersonal, presentational, and interpretive), honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, and literary criticism).

Course Title: Linguistics

Course Number: 06_5003_999

Grade Level: 11

Credits: 5

Students scheduled for course based on teacher recommendation ONLY.

The knowledge of a World Language is a universal tool that opens gateways to human understanding and presents a new approach to dealing with the everyday realities of life. Linguistics is at the base of every World Language. Student will be introduced to the history of a language, the core of a language, the people who speak different languages and the future of language to enhance those skills honed in World Language studies. Language study enhances understandings in other disciplines: history, geography, sociology, literature, and the arts. Linguistics takes these features, recognizes the connection between each branch of learning and language, and analyzes them further. Linguistics is the bridge between language and culture. An effective World Language program recognizes individual differences in learning patterns and abilities and offers options to students with diverse needs and interests. The study of Linguistics will harness these differences. Students will use their knowledge from previous language courses to build upon different skills. They will reflect on their own language experiences. They will consider the many influences of languages. They will appreciate the entire language-learning experience.

HEALTH AND PHYSICAL EDUCATION

Students will take four years of Health and Fitness. Each year, they will take three marking periods of fitness and one marking period of health education. The courses are designed to enhance the physical, mental, emotional, and social well-being of students. The purpose is to educate the mind as well as the body with an emphasis on lifetime fitness.

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Course Title: Fitness I, II, III

Course Number: 07_1001_035; 07_2001_035; 07_3001_035

Grade Level: 9, 10, 11

Credits: 1.25

The course is designed to enhance the physical, mental, emotional, and social well-being of the students. A scientific approach highlighting exercise physiology is the foundation for the student's learning. Integration of kinesiology and principles of anatomy and physiology heighten student's understanding of how the body relates to exercise and the science of human performance. Through the initiatives, games, and activities of Project adventure, the students will gain an understanding and appreciation of others and themselves. By understanding and implementing the concepts of "Challenge by Choice", "STAR goals", and "Full Value", the students will develop leadership, creativity, and risk-taking.

Course Title: Physical Education Elective[#]

Credits: 1

Grade Level: 12

All Theatre Majors must select a Physical Education Elective for one credit to count towards high school graduation requirement.

Course Title: Health I

Course Number: 07_1002_035

Grade Level: 9

Credits: 1.25

This course at the Union County Academy for Performing Arts is designed to assist the student in attaining optimal physical, mental, emotional and social health. Throughout the course students will gain heightened knowledge of overall wellness while exploring themselves and their individual health needs. Integration of technology and a hands-on approach to learning, enable the students to gain practical experiences, which can be extended, into everyday life.

Course Title: Health II

Course Number: 07_2002_035

Grade Level: 10

Credits: 1.25

The sophomore Health Education course at the Union County Academy for Performing Arts will introduce character education to the students. Character education consists of these six pillars: trustworthiness, respect, responsibility, fairness, caring and citizenship. In addition to discussing each of these pillars, the students will also learn about conflict resolution, decision making and suicide prevention. There is a positive relationship between good character and success. The individuals who demonstrate these six pillars of character maximize their potential as capable and productive students. These students are able to achieve a better quality of life for themselves, their families and their community. Integration of technology and a hands-on approach to learning will enable the students to gain practical experience to help make healthy decisions and choices. Students will demonstrate the ability to use interpersonal communication to enhance their well-being. Activities based on these components will consist of role playing, class discussion, interviews, video clips, problem-solving and self- reflection.

Course Title: Health III

Course Number: 07_3002_035

Grade Level: 11

Credits: 1.25

During this course, students will gain the knowledge and skills necessary to enable them to choose the path of a

healthy, productive and fulfilling lifestyle. First, students have the opportunity to analyze aspects of health and wellness by examining injury prevention techniques through the evaluation of unhealthy/risky behaviors. Second, students demonstrate an understanding of current health issues pertaining to existing situations that occur so often in the lives of teenagers today. Students identify unsafe situations and learn to choose appropriate ways to reduce or eliminate the potential risk for injury due to unhealthy/risky behaviors. Finally, students appraise individual and family needs in order to achieve and maintain wellness and design a plan for lifelong wellness, encompassing the social, emotional, intellectual and physical domains of the student. Through hands on learning opportunities, group activities, critical thinking sessions, and technology based learning, the students will be confident in their ability and have the foundation and knowledge necessary to make healthy choices and decisions, and guide them in various challenging situations they might experience throughout their adult lives.

Course Title: First Aid Accident Prevention #
Grade Level: 12

Course Number: 07_HED3231
Credits: 3

Theory and practice of first aid and cardiopulmonary resuscitation and study of accident prevention procedures including non-swimming water safety skills. Upon successful completion of this course, the student is eligible to receive the American Red Cross certification in standard first aid and personal safety and certification for CPR - (cardiopulmonary resuscitation) - basic life support.

INTERDISCIPLINARY STUDIES

Course Title: Financial Literacy
Grade Level: 10
Required Sophomore Course

Course Number: 08_1001_035
Credits: 5

The Financial Literacy online course is designed to meet the high school graduation requirement for personal financial literacy as set forth by the Department of Education for the State of New Jersey. Aside from mandated standards, however, financial education is critically important for our young adults. This course will focus on teaching students the skills they need to reach financial independence, maximize their net worth, and maintain a strong credit score. Credit card usage, appropriate debt, banking services, investments, budgeting, insurance, and prevention of identity theft will be explored and discussed. Students will be engaged in learning about finances in an online environment under the direction and supervision of a teacher. The online approach incorporates a variety of techniques and interactive experiences to accommodate different learning styles. Students will have the opportunity to choose, at their own discretion, to explore more deeply into a topic, repeat a lesson, or seek personal attention from the teacher. Providing students with a sound, practical financial education will benefit them as they venture to college and work where they will be faced with managing money on their own.