

# Roxbury School District



*Advanced Programming, Dual Enrollment &  
Professional Pathways*

## Reasons to take higher level courses

- Exposure to academic dialogue at the highest level
- Eases transition from high school to adult responsibilities
- Increases access to practice autonomy, agency, and independence
- Gives you opportunities to network with professionals in the field (both professional and in academia)
- Allows students the opportunity to explore future professional before having to commit to them
- Allows students to challenge themselves when they still have access to high school level supports



# Advanced Placement Offerings



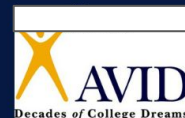
**AP**Capstone™  
Research, Academic Rigor, Distinction

# Impact of AP on College Graduation Rates

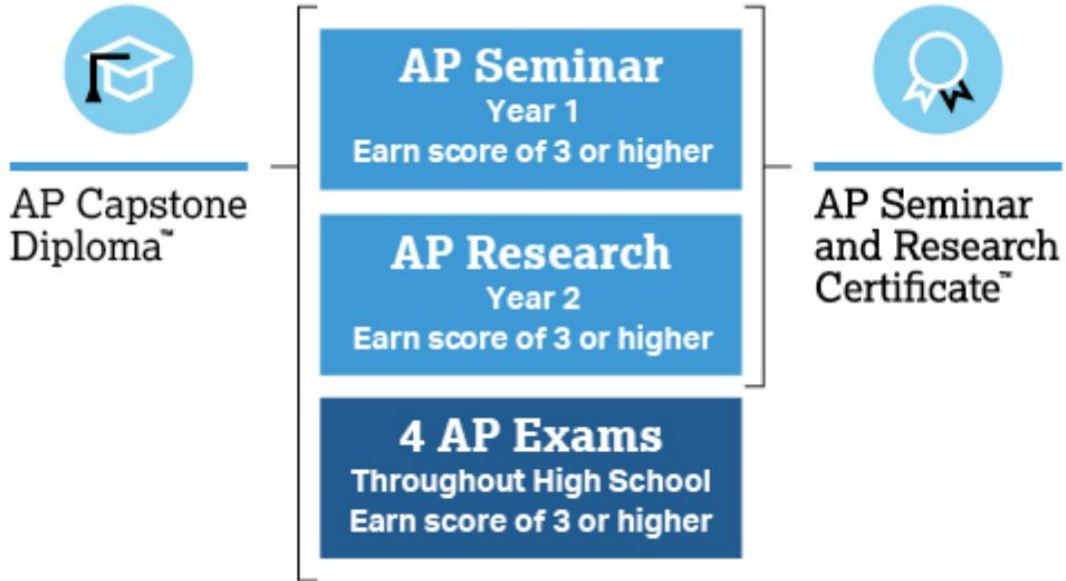
Student Group	AP Exam Grade 3,4,5	AP Exam Grade 1,2	Took AP Class No Test
African American	28% Higher	22% Higher	16% Higher
Latino	28% Higher	12% Higher	10% Higher
White	33% Higher	22% Higher	20% Higher
Low Income	26% Higher	17% Higher	12% Higher
Not Low Income	34% Higher	23% Higher	19% Higher

The relationship between  
Advanced Placement and  
college graduation

(National Center For  
Educational Accountability)





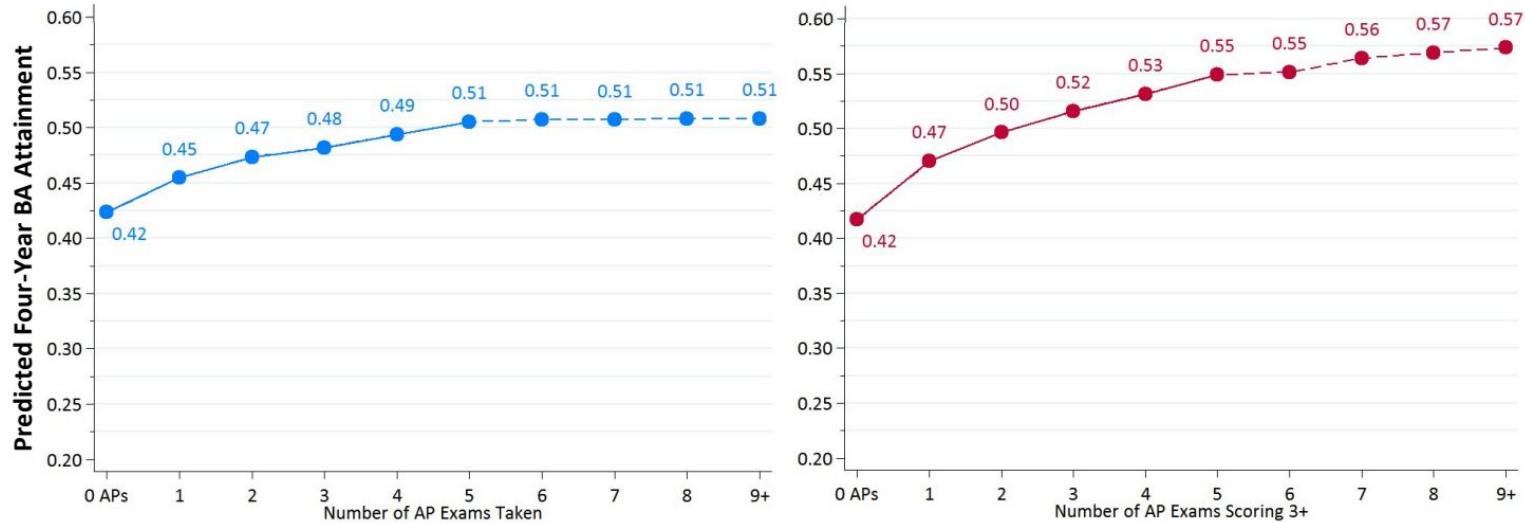


# AP Courses Offered

<b>Biology</b>	<b>Computer Science Principles</b>	<b>Physics C: Electricity</b>	<b>Statistics</b>
<b>Calculus AB</b>	<b>English Lit/Comp</b>	<b>Physics C: Mechanics</b>	<b>Studio Art 2D/3D</b>
<b>Calculus BC</b>	<b>Environmental Science</b>	<b>Psychology</b>	<b>US Gov/Politics</b>
<b>Chemistry</b>	<b>European History</b>	<b>Research</b>	<b>US History</b>
<b>Comparative Government &amp; Politics</b>	<b>French Language</b>	<b>Seminar</b>	<b>World History</b>
<b>Computer Science A</b>	<b>Music Theory</b>	<b>Spanish Language</b>	

# College Board Research

**Additional APs Positively Relate to On-Time Degree Completion with a Leveling Off of Effects**



**Notes:** Solid lines denote that the estimate for a given number of AP exams is statistically significant from the estimate for one fewer AP exam. Dotted lines denote that these estimates are not statistically different from each other. These predictions use the **average SAT (1684.91 out of 2400)** and **HS GPA (3.63)** of students.

# Career Pathways & Academies



[mcvts.org](http://mcvts.org)

*Inspire. Prepare. Succeed.*



# Career Pathway & CTE: Quick Facts

Career-related pathways, specifically CTE pathways, generally carry transferable credits and/or certifications.

Career-related education allows students to practice work skills and leadership skills before entering the workforce.

Career-related pathways have been shown to help focus students in their learning path, increasing the likelihood of graduation.

CTE students are more likely to attain certificates in post-secondary institutions than their traditional academic trajectory counterparts.

Mid to low-income students are more likely to begin their post-secondary preparation in CTE programs than those from the highest income bracket.



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## Aviation Pathway

	Pilot Pathway	Drone Pathway
Year 1	Intro to Aviation (No Prerequisite)	
Year 2	Pilot Pathway 1 (Must complete Intro to Aviation)	Drone Technologies** (Must complete Intro to Aviation) **Students are Ready for Part 107 drone test
Year 3	Pilot Pathway 2* (Must complete Pilot Pathway 1) *Students are ready for Private Pilot Written Test	
Year 4	Option 1: Students may complete the alternate pathway Option 2: Independent Study/ Senior Option	
***Students may take Drone Technologies and Pilot Pathway concurrently		





# Roxbury's Aviation Program

- Prepares students for their Private Pilot License
- Prepares students for their Part 107
- Exposes students to variety of career opportunities in the world of aviation
- Exposes students to guest speakers, field trips, and post secondary options
- Hands on experiences - drones, flight simulators, full motion simulators



## FUTURE EDUCATORS SEQUENCE

YEAR 1 ELECTIVE CHOICES	YEAR 2 ELECTIVE CHOICES	YEAR 3 ELECTIVE CHOICES	YEAR 4 ELECTIVE CHOICES
FAMILY LIFE SKILLS (previous Child Development 1)	CHILD DEVELOPMENT (previous Child Development II)	TEACHING YOUNG CHILDREN	TOMORROW'S TEACHERS





# Tomorrow's Teachers



KEAN



**Exploration:** Explore various school settings such as inclusion, ESL, and Bilingual Education via field trips to school sites and shadow teaching.

**Commitment:** Examine beliefs and predispositions of self and others, historical and current issues in education, as well as the role of government and the courts play in school policy.

**Preparation:** Design and develop in-depth lesson plans and classroom demonstrations. Engage in preparation for the transition to college via skill-building and SAT review.

**Experience:** Participate in a formal internship, reflect on learning through journals and begin the edTPA portfolio.



CAREER  
PATHWAYS



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## AIR FORCE JROTC

YEAR 1	YEAR 2	YEAR 3	YEAR 4
AIR FORCE JROTC I	AIR FORCE JROTC II	AIR FORCE JROTC III	AIR FORCE JROTC IV

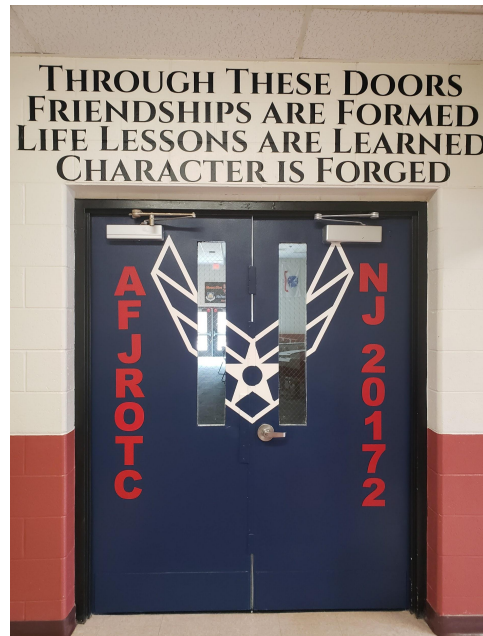


# Air Force Junior ROTC

- Cross Town agreement with Mount Olive HS
- Elective class focused on Leadership & Aerospace Science
- NO military obligation
- Utilizes military principles in teaching life skills for success
- Garner practical leadership experience to enhance resume
- Eligibility for unique JROTC extracurriculars & field trips

## Mission Statement

Develop citizens of character dedicated to serving their  
Nation & Community







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**CAREER  
PATHWAYS**

## SPORTS MEDICINE/ PHYSICAL THERAPY SEQUENCE

YEAR 1 ELECTIVE CHOICES	YEAR 2 ELECTIVE CHOICES	YEAR 3 ELECTIVE CHOICES	YEAR 4 ELECTIVE CHOICES
FOUNDATIONAL COMPONENTS OF ATHLETIC TRAINING & PHYSICAL THERAPY HONORS	PATHOLOGY & PREVENTION OF SPORTS INJURIES HONORS	KINESIOLOGY & ORTHOPEDIC ASSESSMENT	INJURY REHABILITATION MANAGEMENT & SURGICAL INTERVENTION
		ANATOMY & PHYSIOLOGY HONORS	<b>CHOICE ELECTIVE</b>
			INTRODUCTION TO EXERCISE SCIENCE
			INTRODUCTION TO EXERCISE PSYCHOLOGY







# Unique Clinical Experience (4 Years)

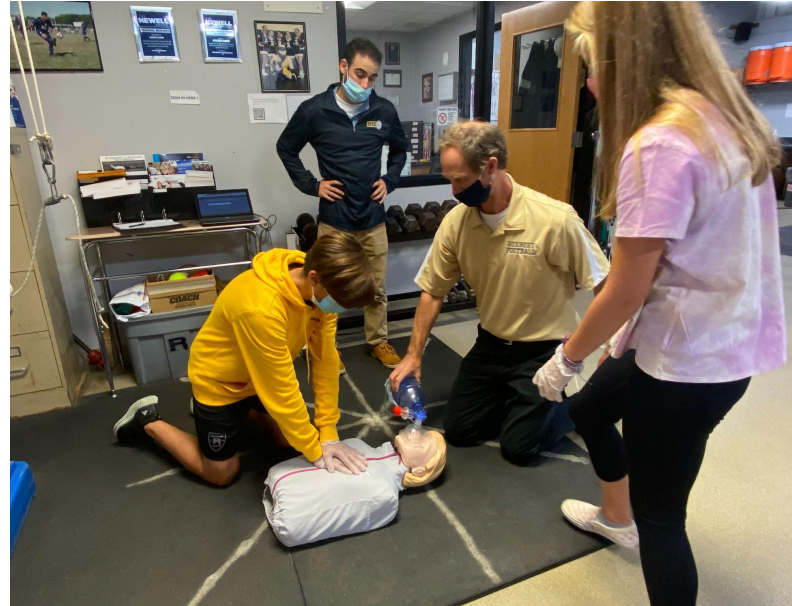


- Students get the chance to practice skills and apply the knowledge that they have learned in class.
- Goals such as focusing on communication and acting professional in a healthcare setting

**Freshmen: 25 hours**

**Sophomores: 25 hours**

**Juniors: 30 hours**



# Culminating Academic Options

## (Grade 12)



- **College Option:**
  - Providing students meet the academic criteria, they may attend County College of Morris for all courses and earn up to 24 credits paid for Morris County Vocational School District
  - Morris County Vocational School is also in negotiations with Fairleigh Dickinson University to offer Sports Medicine Students a fully college option as well.
- **Continue at Roxbury High School for advanced courses/projects including:**
  - Capstone Research Project in Athletic Training or Physical Therapy
  - Continued access to AP and honors-level academic classes





## Engineering, Design, and Technology Pathways

	Engineering, Design, and Technology Pathways		
	Engineering	Woodshop	Structural Design & Fabrication
Step 1	Engineering I	Woods 1	Engineering I and/or Woods I
Step 2	Engineering II	Woods II	Intro to SDF (10th & 11th Graders Only)
Step 3	Adv. Computer Design ( <b>Honors</b> )	Woods III ( <b>Honors</b> )	SDF ( <b>Honors</b> ) (12th Grade Only)
Step 4	3D Studio ( <b>Honors</b> )	Woods IIII ( <b>Honors</b> )	
Relevant Electives to Consider	Physics Robotics Entrepreneurship	Intro to Business Entrepreneurship Design Thinking	



# Structural Design & Fabrication

- **Intro to SDF & SDF Honors**
- **Variety of skills** - plumbing, electrical, carpentry, roofing, painting
- Every 2 years **SDF Honors** completes a house for Morris Habitat for Humanity
- Exposes students to post-secondary options with unions, tech schools, colleges
- Provides students with industry certifications - OSHA 10 & Certified Commercial Solar Panel Installer



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# Dual Credit



# Impact of Dual Credit: Quick Facts

Dual credit is highly correlated to postsecondary degree attainment

Dual credit courses have a higher positive impact on students who start at a community college

Dual credit has a significant impact on attainment of college completion is even higher for low socio-economic students

Dual credit enrollees earn higher grades in college than non-dual credit enrollees

Dual enrollment courses have been shown to cut down on the financial burden of college





- Environmental Science
- Geophysical Science Honors
- Biology Honors
- Chemistry Honors
- Physics Honors
- Anatomy & Physiology I Honors
- Pathology and Prevention of Sports Injuries
- Kinesiology and Orthopedic Assessment
- Intro to Athletic Training and Physical Therapy
- AP Biology
- AP Chemistry
- AP Environmental Science
- AP Physics C
- Astronomy
- Social Media Marketing
- Television Production







# FAIRLEIGH DICKINSON UNIVERSITY

- Biology Honors
- Chemistry Honors
- Physics Honors
- Anatomy & Physiology I Honors
- AP Biology
- AP Chemistry
- AP Environmental Science
- AP Physics C
- AP Literature
- Accounting II Honors
- Structural Design & Fabrication
- Graphic Design III
- Creative Writing
- Journalism III Honors
- Calculus
- AP Calculus AB/ BC
- AP US Government & Politics
- AP European History
- AP US History II
- Contemporary World Issues (6 credits)
- History through Sports
- AP French & French IV Honors
- AP Spanish & Spanish IV Honors
- Teaching Young Children Honors



# *Additional Dual Enrollment Partnerships*

- Tomorrow's Teachers - Kean University
- Expository Writing - Rutgers University



## Titan Express Program - County College of Morris

- Coming in 2024-2025 school year
- Will work much like Seton Hall and FDU where the student can sign up for Dual Credit based on the courses that we offer here at RHS.
- **College Option/ Challenger Program** also available - Students can register & pay for 1 class in the Fall & 1 class in the spring that will be taught @ CCM campus (must be something we do not offer)



# Overarching Questions

- AP Capstone: Diploma and Certificate → What's the difference? How to achieve each...
- Career Pathways → What does it look like?
- Dual Enrollment → Where's my credit?
- AP vs. Dual Enrollment → What to take? Impact on School Rankings
  - (40% of US News Methodology)
- What is "College Equivalent"?



# Learn More



- [Episode 17 - Academic Research at RHS](#)
- [Episode 22 - Expository Writing](#)
- [Episode 24- AP and Dual Enrollment](#)
- [Episode 39 - Sports Medicine Academy](#)