



Nicolas Junior High

2017/2018

Elective Course Catalog

Electives Course Title	Electives Course Description
AVID 7	AVID (Advancement Via Individual Determination) is a course designed to help students prepare to enter a four-year college or university. The AVID student is committed to taking college preparatory classes, maintaining a high grade point average, developing leadership skills, participating in community service, and ultimately attaining acceptance at the college or university of his or her choice.
AVID 8	AVID (Advancement Via Individual Determination) is a course designed to help students prepare to enter a four-year college or university. The AVID student is committed to taking college preparatory classes, maintaining a high grade point average, developing leadership skills, participating in community service, and ultimately attaining acceptance at the college or university of his or her choice.
STEM IA - Basics of Coding	This is a year-long course for 7th and 8th grade students. Program focuses on teaching students JAVA programming language as it applies to solving practical math problems and ELA standards. Applied coding will help promote the CCSS, NGSS as well as engage students into real life applications.
STEM IB - Applied Coding	This is a year-long course for 8th grade students. (7th grade students can take the course with teacher approval.) This advanced coding class provides Nicolas students the opportunity to further develop their skills in Java. Students will continue to focus on solving real world problems by leveraging personal creativity and innovation. Students will take the Advanced Placement Computer Science exam and participate in the Congressional APP Challenge, which focuses on Android studies and App development.
STEM IIA - Basics of Robotics & Design	This is a year-long course for 7th and 8th grade students. In this introductory robotics class students will learn about various mechanical gears, gear ratios, speed, torque, and types of movement. They will also learn to build and program robots using ROBOTC.
STEM IIB - Applied Robotics & Design	This is a year long course for 8th grade students. (7th grade students can take the course with teacher approval.) In this course students learn the physics to mechanical systems, energy transfer, machine automation, and computer control systems. Students use a robust robotics platform to design, build, and program creative solutions to real world problems and applications. Program emphasizes real life STEM applications.



Nicolas Junior High

2017/2018

Elective Course Catalog

STEM IIIA - 3D Modeling & Design (CAD 1)	This is a semester-long course for 7th and 8th grade students. This course provides students with the value of applied engineering. They are introduced to and use the design process to solve real world problems. Students use industry standard 3D modeling software to create virtual images of the designs and create a portfolio.
STEM IIIB - 3D Modeling & Design (CAD 2)	This is a semester-long course for 7th and 8th grade students. This course provides students with the opportunity to use the design process to solve real world problems. Students use industry standard 3D modeling software to create virtual images of the designs and create a portfolio. They will be challenged with projects on a larger scale using their foundation from CAD 1. (Semester Class, Must take CAD 1)
STEM IVA - Basics of Prototyping	This is a semester-long course for 7th and 8th grade students. Students will use Computer Aided Design programs in order to design and create a 3D model using 3D printers or manufacture final products consisting of a race car, a mousetrap car, a bridge, an airplane and a rocket. Students will be given open ended parameters that allow them to develop final team or individual design solutions based on their own research and creativity. Teams will keep and maintain design logs in order to organize and optimize their thinking processes.
Art I	Art I is a beginning to intermediate level course that focuses on design concepts and terminology, and provides technical skills in drawing, painting, sculpture, and mixed media. Students will also explore historical traditions in art. This is a one-semester course.
Art II	This is an intermediate to advanced level course in which students delve further into the creative process, collaborate, and work in series, using techniques and materials with increasing skill. They will also explore purposes for making art, and careers in the Visual Arts.
Mosaic Art	Students will learn the art of creating beautiful mosaics using glass and ceramic pieces. They will work collaboratively to create large art pieces contracted by local businesses and community members. They will also create pieces to install on the campus.
Advanced Glass Mosaic	Students will create large and elaborate glass mosaic pieces, which will be installed on the Nicolas Campus. They will also market their abilities to local businesses and organizations, creating public works of art, which will be available for purchase.



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2017/2018

Elective Course Catalog

Band Advanced	This powerful group works primarily from concert materials (standards/pop/Latin/swing) supplemented by technical studies and aids.
Band Begin	Learn everything from basic playing techniques, instrument care and assembly, to the more advanced performance skills we will be using in concert.
Guitar	Students will receive weekly guitar lessons and practice in small groups according to their ability levels throughout the week. Beginners will learn technique fundamentals, what and where the notes are, and basic chords. Intermediate and advanced students will put those skills into practice with basic chord progressions, advanced chords, chord formulas, tabs, strums and finger styles. Owning a guitar is not required for this class.
Choir I	Choir I is a group singing experience which introduces choral techniques, music fundamentals, and performance standards. Performances are included the class expectations.
Choir II	Choir II is an advanced group singing experience where students develop choral techniques, music fundamentals, and performance standards. Performances are included in class expectations.
Digital Music	This course is devoted to music composed or realized through electronic media or computer applications related to music, such as creative work, music writing and printing, and performances of contemporary compositions. The course is inclusive of music standards instruction, the study of appropriate physics of sound, and students learn to use the equipment through performance of music from other sources and explore personal means of self-expression.
Dance I	This class is geared for students who have very little dance experience or none at all. Students will learn basic movement terminology and beginning Jazz, Modern and Broadway style movements. Students are required to dress out every day. Performances are a part of the class expectations.
Dance II	This class will build on the technique and terminology introduced in Music and Movement I. Students will learn intermediate Jazz, Modern and Broadway style movements. Students will dress out every day. One performance per semester is required. Successful completion of Music and Movement I, dance experience, or teacher recommendation is required. Performances are a part of the class expectations.



Nicolas Junior High

2017/2018

Elective Course Catalog

Dance III	This class is geared for students who have dance experience. Students will choreograph dances and work individually on various styles of dance. Performances are a part of the class expectations.
Theatre Production	This course provides a balanced theater arts program that emphasizes dramatic literature and/or musical theater activities that lead to the formal presentation of a scripted play. The class emphasizes awareness and practice in theater production, performance, direction, stage technique, voice, stage design, costuming, properties, and theater history. Students develop language skills and appreciation through reading dramatic literature from a worldwide perspective and writing critiques, character analyses, and play reports.
Theatre Arts I	This course will provide students a more in-depth approach to acting, including stage movement, scene work, character development, terminology, rehearsal techniques, and performance analysis.
School Broadcasting and Media	Focus on Broadcast and Media journalism. Students will create a weekly school-wide broadcast for their peers and will also develop and publish the school yearbook.
Digital Photography	Students learn photographic techniques that may incorporate both traditional and contemporary (digital and multimedia technologies) traditions. Students create projects using digital photography as a fine art.