

spotlight

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ELECTIVE SURGERY

Budget deficits require elected officials to reassess course offerings

KEY FACTS: • During the 2009-10 school year, North Carolina's public schools offered nearly 540 different courses, nearly a 100-course increase from ten years ago.

• According to course membership data for the 2009-10 school year, North Carolina public schools had 208 undersubscribed high school courses, 65 undersubscribed middle school courses, and twelve undersubscribed elementary school courses.

• A statewide curriculum audit would be a sound way to reduce costs and refocus our curriculum on core skills.

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In 2007, the John Locke Foundation published, "Reading, Writing, and Handbells: Course Enrollment in the Era of No Child Left Behind."¹ That study highlighted courses and enrollment for eleven specialty courses offered in North Carolina public schools. In Table 1, state course membership data for the 2009-10 school year has been added to figures from the 2007 study.

Six of the eleven specialty classes had an increase in the number of courses, and five had an increase in enrollment. African American Studies, American Indian Studies, and Human Geography had the greatest gains in courses and enrollment, while Handbells, Minority Studies, and Film Production had the largest declines. Latino American Studies was discontinued, presumably for lack of interest.

Unfortunately, few North Carolinians are aware that the state and local education officials continue to increase the number of specialty courses offered in our public schools. In 2000-01, North Carolina public schools offered approximately 450 course options. By 2005-06, the state increased course options to about 500 courses.² During the 2009-10 school year, North Carolina's public schools offered nearly 540 different courses, nearly a 100-course increase from ten years ago.³ The Appendix to this report lists all courses offered during the 2009-10 school year.

Because no formal definition exists, I define an undersubscribed course as

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Table 1. Examples of Specialty Course Enrollment, 2005-06 and 2009-10

<i>Specialty Course</i>	<i>2005-06 Courses</i>	<i>2009-10 Courses</i>	<i>Percentage Change</i>	<i>2005-06 Enrollment</i>	<i>2009-10 Enrollment</i>	<i>Percentage Change</i>
African American Studies	122	304	+149%	2,857	3,189	+12%
American Indian Studies	7	33	+371%	123	265	+115%
Electronic Music	37	36	-3%	418	494	+18%
Film Production	78	62	-21%	1,144	734	-36%
Folk Arts	84	85	+1%	1,885	1,822	-3%
Geography in Action	32	38	+19%	708	740	+5%
Handbells	40	24	-40%	548	328	-40%
Human Geography	58	130	+124%	1,319	2,502	+90%
Latino American Studies	2	N/A	N/A	3	N/A	N/A
Minority Studies	97	56	-42%	1,788	902	-50%
Social Problems	78	185	+137%	1,439	1,307	-9%

one that has had 50 or fewer classes offered statewide. If we apply this standard to course membership data for the 2009-10 school year, North Carolina public schools had 208 undersubscribed high school courses, 65 undersubscribed middle school courses, and twelve undersubscribed elementary school courses.⁴

Background

Issues like class size, administrative personnel, support staff, and teacher compensation have dominated discussions about potential cuts to North Carolina’s K-12 budget. Because all four represent significant expenditures in the budget, it is reasonable for legislators, policymakers, and educators to consider the fiscal and educational impact of increasing class sizes, eliminating administrative and support staff, and changing the way that state and local governments pay teachers.

Course offerings and electives have not been part of the discussion. The reasons are simple. Few have examined or questioned the claims, often articulated by public school advocates and elected officials, that elective courses have been in decline in an era of increasing accountability and testing mandates.⁵ Additionally, the public often takes the purported educational benefits of the electives for granted. Many North Carolinians believe that multiple course offerings have served as an effective dropout prevention strategy. In addition, they trust that electives have reinforced and enhanced content taught in core subjects like English, math, science, and social studies.⁶

Linda Bost, principal of Davie High School, articulated the dropout prevention argument best. In an article highlighting dropout prevention strategies, she commented, “For many students, taking electives is the only reason they [disengaged students] come to school.”⁷

A 2007 report, *Raise the Graduation Rate: A Call to Action*, echoed Bost’s opinion. Among the many recommendations offered by the report, State Superintendent June Atkinson urged school districts to require a “rigorous and relevant course of study with engaging electives for each student” as a way to prevent dropouts.⁸

Neither Bost nor Atkinson, however, presented quantitative data that suggested a direct relationship between electives and dropouts.

Indeed, the relationship between electives and dropouts is logical and compelling, but ultimately falls short. Graduation rates and test scores were not necessarily lower during periods when schools offered fewer electives. Likewise,

student performance has not increased in concert with the dramatic rise in electives over the last decade.

Elsewhere, officials at the NC Department of Public Instruction argued that electives reinforce and teach basic skills in new ways:

Special areas, including each of the four arts areas, foreign language, career technical education, health and physical education provide students with multiple ways to communicate beyond standard written and verbal expression and allow for students to express their knowledge and understandings in various ways. The thinking processes used in special area classes are processes which transfer and apply across subject areas.⁹

The authors of *The Balanced Curriculum: A Guiding Document for Scheduling and Implementation of the North Carolina Standard Course of Study at the Middle School Level* pointed out that many of the concepts learned in electives are applicable to core subject classes. For example, the use of patterns and fractions in music may allow students to better grasp concepts used in math or science.¹⁰

Because of the potential for electives to supplement instruction in the core subjects, a wholesale rejection of electives is not educationally sound. North Carolina's 1.5 million students should have access to electives in the visual and performing arts, foreign languages, and career and technical education, as well as Advanced Placement and International Baccalaureate courses. Nevertheless, there must be close collaboration between core and elective teachers. In schools where such collaboration does not exist, electives may do little to enhance basic skills.

The desirability of reducing electives and course offerings does not mean that state education officials have the authority to do so. After all, the North Carolina Constitution requires the state public school system to provide a "sound basic education." According to the *Hoke County Board of Education v. State* (also known as *Leandro*), electives are secondary to this requirement:

[T]he right to the equal opportunity to a sound basic education, is only to the sound basic education, not the frills and whistles. The State Constitution does not require that children be provided a prep school education, nor that children be provided the courses and experiences to enable them to go to Yale or Harvard. While there is no restriction on high-level electives, modern dance, advanced computer courses and multiple foreign language courses being taught or paid for by tax dollars in the public schools, the Constitutional guarantee of a sound basic education for each child must first be met.¹¹

The ruling identified an important reason why state education leaders urged school systems to offer numerous electives:

The political and educational "leadership" apparently were terrified that being required to consider successful at-risk educational practices, and if necessary, re-allocate existing resources from programs not mandated by the constitutional requirement as amplified by the Leandro doctrine would, according to Phil Kirk, chairman of the State Board of Education, ... "drive more of the brighter students away from public schools into private education."¹²

Put simply, the courts concluded that state and local school leaders rushed to provide electives in an attempt to maintain their client base at the expense of at-risk students. Unfortunately, Howard Manning, a Wake County Superior Court judge who presides over *Leandro*, has yet to question state officials about the vast expansion of courses and electives offered to North Carolina public school students.

Conclusion

In 1985, the state established the Basic Education Program to ensure that all students have access to a core set of classes. The Basic Education Program describes the education program that must be offered to every child in the North

Table 2. High School Electives outlined in the NC Basic Course of Study

Visual Arts and Crafts	Dance	Music	Communication Skills	Healthful Living	Mathematics	Science	Social Studies
Photography	Dance I, II, III, IV	Classical Piano	Journalism	Swimming	Technical Mathematics	Advanced Biology	International Studies
Jewelry Making	Dance History	Electronic Music	Dramatic Literature		Trigonometry	Advanced Chemistry	Law and Justice
Textiles	Composition	Music Theory	Humanities		Advanced Algebra	Anatomy and Physiology	Psychology
Pottery	Choreography	Stage Band	Speech		Advanced Placement Calculus	Applied Science	Sociology
Film-Making		Classical Guitar	Developmental Reading		Computer Applications	Astronomy	Local and State History and Government
Commercial Design/Graphics		Swing Choir	Composition		Analytical Geometry	Geology	Humanities
Batik			Creative Writing		Probability and Statistics	Field Botany	Advanced U.S. History
Art IV						Environmental Studies	Advanced World History
						Advanced Physics	Advanced Government
						Independent Studies	Advanced Economics

Carolina public schools. This ensures that all students have equal access to the arts, communication skills, physical education and personal health and safety, mathematics, media and computer skills, science, second languages, social studies, and vocational and technical education courses.¹³

Under the updated *Basic Education Program for North Carolina's Public Schools* published in 1994, North Carolina education officials recommended that high schools offer 56 electives (see Table 2).¹⁴ Some of the courses recommended in 1994, particularly those in the visual arts, are no longer consistent with the needs of North Carolina's economy. Courses listed in areas such as math, science, and social studies provide a reasonable starting point for developing electives that meet the academic needs of students.

There is no evidence that school districts or the state have conducted an audit of the costs and outcomes of elective courses. A statewide curriculum audit would be a sound way to reduce costs and refocus our curriculum on the core skills that many of our public school students so desperately need.

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End Notes

1. Terry Stoops, "Reading, Writing, and Handbells: Course Enrollment in the Era of No Child Left Behind," John Locke Foundation *Spotlight* No. 332, September 13, 2007, johnlocke.org/research/show/spotlights/181.
2. *Ibid.*, p. 2.
3. As I pointed out in "Reading, Writing, and Handbells" (p. 3): "There are many factors accounting for the increase. Online courses have increased the number of courses available to students. Initiatives like the Learn and Earn, International Baccalaureate, and Advanced Placement programs have increased the number of students enrolling in advanced and postsecondary level courses. Furthermore, some public-school systems have responded to the job market by offering courses that meet the changing demands of business, industry, and human services. In addition, thematic and charter schools have multiplied in recent years, and these schools offer students unique class offerings and courses of study. Finally, public schools have complied with interest groups that want to expose children to political or social ideologies."
4. North Carolina Department of Public Instruction (NC DPI), Financial and Business Services, "2009-2010 Course Membership Summary," January 2010.
5. Winnie Hu, "High Schools Add Electives to Cultivate Interests," *The New York Times*, Oct. 26, 2008, www.nytimes.com/2008/10/27/education/27electives.html. See also NC DPI, *The Balanced Curriculum: A Guiding Document for Scheduling and Implementation of the North Carolina Standard Course of Study at the Middle School Level* [Draft], pp. 54-56, 2005: "In this age of high stakes testing and accountability, combined with tight budgets, schools have been forced to establish priorities with how they will serve their students. While the thinking may be that reduced class size and extra help in tested areas will improve students' achievement on standardized tests, the cost of eliminating special programs to provide these things will be damaging to students' overall development and education. Between the 2008-09 and 2009-10 school years, there was a net loss of nine elective courses offered to North Carolina's public school students. While the state eliminated courses like Agricultural Production III, students had access to new courses, such as Arabic I, AOF225 Securities, AOF230 Insurance. As mentioned earlier in this paper, longer-term trends show that the number of electives has skyrocketed."
6. SL 2002-178. In 2002, the General Assembly unanimously passed Session Law 2002-178, which ordered the State Board of Education to examine "[t]he examination of the appropriateness of electives and exploratory courses at the middle school level."
7. NC DPI, "Davie High Pulls Out All the Stops to Reduce Dropout Rate," April 2002, www.ncpublicschools.org/best_practices/0204_feature.html.
8. June Atkinson, *Raise the Graduation Rate: A Call to Action*, September 2007, www.ncpublicschools.org/statesuperintendent [Cached].
9. NC DPI, *The Balanced Curriculum: A Guiding Document for Scheduling and Implementation of the North Carolina Standard Course of Study at the Middle School Level* [Draft], pp. 54-56, 2005.
10. *Ibid.*
11. *Hoke County Board of Education v. State*, 95 CVS 1158 (N.C. Super. Ct. 26 March 2001), slip op., 68, p. 77.
12. *Ibid.*, Section Four — Hoke County & Beyond — Judgment, p. 11.
13. NC General Statutes, §115C-81 et al.
14. NC State Board of Education, *The Basic Education Program for North Carolina's Public Schools*, 1994, pp. 50-51, www.ncpublicschools.org/basic_ed_plan.

Appendix. 2009-10 K-12 Courses

Language Arts and Foreign Language	Math; Computer Science; and Science	Social Studies	Arts	Business	Agriculture; Family & Consumer Sciences; and Health	Trades & Technology	Other Courses
Reading	Math (K-8)	Social Studies (K-8)	Dance Education (K-8)	Career Development Pilot Program	Agriculture Pilot Program	Intro. to Trade & Industrial Education	Self-Contained
Language Arts	Accelerated Middle School Math	Government & Politics: Comparative	Dance I (9-12)	Career Management	Agriscience Applications	Trade & Industrial Pilot Program	Individualized Curriculum
Speech I	Fundamental Mathematics I	Government & Politics: United States	Dance II (9-12)	Exploring Career Decisions	Agricultural Production I	Automotive Service Technology I	Language Arts/Math
Speech II	Fundamental Mathematics II	International Relations	Dance III (9-12)	Career Development Internship	Agricultural Production II	Automotive Service Technology II	Language Arts/Math/ Science
Debate	Technical Mathematics I	U.S. Studies (General)	Dance IV (9-12)	Principles Of Business & Personal Finance - BE	Animal Science I	Automotive Service Technology III	Language Arts/Math/ Social Studies
English I	Technical Mathematics II	Minority Studies	Special Topics Dance I (9-12)	Exploring Business Technologies	Animal Science II	Collision Repair Technology I	Language Arts/Social Studies
English II	Foundations of Algebra	Special Interest Social Studies	Special Topics Dance II (9-12)	Business Pilot Program	Animal Science II - Small Animals	Collision Repair Technology II	Math/Science
English III	Foundations of Advanced Algebra	African American Studies	Dance History (9-12)	Business Law	Equine Science I	Aerospace I	Science/Physical Education (Health)
English IV	Introductory Mathematics	American Indian Studies	Independent Study in Dance	Business Management and Applications	Equine Science II	Aerospace II	Social Studies/Science
Special Interest English (Composition)	Algebra I-A	Local/State History	General Music (K-12)	Intl Baccalaureate (IB) Business Mgmt - BE	Exploring Biotechnology	Aerospace III	Social Studies/Science/ Health (P.E.)
Special Interest English (Language)	Algebra I-B	U.S. History	Music Theory (10-12)	Small Business/ Entrepreneurship - BE	Agricultural Mechanics I	Diesel Mechanics I	Music/Art
Special Interest English (Literature)	Algebra I	European History	Music History/ Appreciation (9-12)	Computerized Accounting I	Agricultural Mechanics II	Diesel Mechanics II	Healthful Living (K-8)
Special Interest English (Reading)	Algebra II	World History	Vocal Music I	Computerized Accounting II	Agricultural Mechanics III - Small Engines	Marine Occupations I	Proj Lead The Way-Intro to Engineering Design
Special Interest English (Other)	Advanced Functions And Modeling	Bible History	Vocal Music II	Foundations of Information Technology	Agricultural Education Special Interest	Marine Occupations II	Proj Lead The Way-Principles Of Engineering
Journalism I	Foundations Of Geometry	IB History of Americas	Vocal Music III	Networking I - BE	Horticulture I	Furniture/Cabinet Making I	Proj Lead The Way-Digital Electronics
Journalism II	Geometry	IB 20th Century History	Vocal Music IV	Network Administration I - Linux	Horticulture II - General	Furniture/Cabinet Making II	Proj Lead The Way-Computer Integrated Manufacturing
American Literature, Language & Composition	Trigonometry	IB International History	Orchestra I	Network Administration II - Microsoft	Horticulture II - Turf Grass	Furniture/Cabinet Making III	Proj Lead The Way-Civil Engineering & Architecture
British Literature, Language & Composition	Discrete Mathematics	Geography	Orchestra II	AOF105 Introduction to Financial Services	Environmental & Natural Resources I	Electronics I	Proj Lead The Way-Biotechnical Engineering
English Language and Composition	Integrated Mathematics I	World Geography	Orchestra III	AOF110 Economics and the World of Finance	Environmental & Natural Resources II	Electronics II	Proj Lead The Way-Aerospace Engineering
English Literature and Composition	Integrated Mathematics II	Human Geography	Orchestra IV	AOF115 Banking and Credit	Biotechnology & Agriscience Research I	Metals Manufacturing I	Proj Lead The Way-Engineering Design & Development
English as a Second Language	Integrated Mathematics III	Geography In Action	Band I	AOF210 Financial Planning	Biotechnology & Agriscience Research II	Metals Manufacturing II	Exploring Technology Systems
French I	Integrated Mathematics IV	Citizenship Education	Band II	AOF225 Securities	Horticulture II - Landscape Construction	Metals Manufacturing III	Fundamentals of Technology
French II	Special Topics In Math	Current Affairs and Issues	Band III	AOF230 Insurance	Agriculture Apprenticeship Program	Electro-Mechanical Technology I	Manufacturing Systems
French III	Probability and Statistics	American Government (10-12)	Band IV	AOF235 International Finance	Agricultural Cooperative Program	Electro-Mechanical Technology II	Communications Systems
French IV	AP Statistics	Law Related Studies (10-12)	Jazz Ensemble (9-12)	Business Computer Technology	Agricultural Internship	Welding Technology I	Transportation Systems
French V	Pre-Calculus	Contemporary Law and Justice	Electronic Music	Computer Applications I	Agricultural Advanced Studies	Welding Technology II	Structural Systems
Chinese I	IB Math Studies 1	Economics (10-12)	Guitar	Computer Applications II	University Agricultural Education	Welding Technology III	Technology Education Special Interest
Chinese II	IB Math Studies 2	Consumer Economics	Piano	Computer Applications III	Community College Business/Marketing/ Agriculture	Masonry I	Technology Apprenticeship Program

more >>

Language Arts and Foreign Language	Math; Computer Science; and Science	Social Studies	Arts	Business	Agriculture; Family & Consumer Sciences; and Health	Trades & Technology	Other Courses
Chinese III	Fifth Year Math	Civics and Economics	Handbells	E-Commerce I	Family & Consumer Sciences - Pilot Program	Masonry II	Technology Internship
Chinese IV	IB Math Methods 2	Economics: Macro	Independent Study In Music	E-Commerce II	Teen Living	Masonry III	University Technology Education
Spanish I	AP Calculus (AB)	Economics: Micro	Creative Dramatics (K-8)	Computer Programming I - VB Net	Exploring Life Skills	Construction Technology I	Community College Industrial Technology
Spanish II	AP Calculus (BC)	Sociology	Introduction to Theatre Arts (9-12)	Computer Programming II - VB Net	Apparel Development I	Construction Technology II	Physical Education (K-8)
Spanish III	Math HI I IB	Social Problems	Theatre Arts I (9-12)	Computer Programming I - Other Languages	Apparel Development II	Construction Technology III	Health Education (K-8)
Spanish IV	Math HI II IB	Community Action Projects (Internships)	Theatre Arts II (9-12)	Computer Programming II - Other Languages	Foods I - Fundamentals	Electrical Trades I	Health/Physical Education (Required 9-12)
Spanish V	IB Math Methods I	World Religions	Theatre Arts III (9-12)	IB Information Technology	Foods II - Advanced	Electrical Trades II	Health Education (Elective 9-12)
German I	Community College - 4Th Math	Anthropology	Theatre Arts IV (9-12)	Data Base Programming I - Oracle Academy	Housing & Interiors I	Air Condition/ Refrigeration I	Physical Education (Elective 9-12)
German II	Community College Math	Psychology	Technical Theatre I (9-12)	Data Base Programming II - Oracle Academy	Housing & Interiors II	Air Condition/ Refrigeration II	Health/Physical Education (Elective 9-12)
German III	Computer Skills/ Education	IB Psychology II	Technical Theatre II (9-12)	Bus and Info Tech Ed Special Interest	Parenting and Child Development	Air Condition/ Refrigeration III	Community College Healthful Living
German IV	Fundamentals of Computer Programming	Humanities	Theatre History (9-12)	AOIT105 Introduction to Information Technology	Foods II - Food Science	Plumbing I	JROTC I
German V	AP Computer Science A	Contemporary Issues In NC History	Acting (9-12)	AOIT110 Web Page Design	Life Management	Plumbing II	JROTC II
Japanese I	AP Computer Science AB	Community College Social Studies	Directing (9-12)	AOIT120 Digital Networks	Financial Education	Cosmetology - Introduction	JROTC III
Japanese II	Community College Computer Science		Play Production (9-12)	AOIT125 Systems Support and Maintenance	Family & Consumer Sciences Special Interest	Cosmetology I	JROTC IV
Japanese III	Science (K-8)		Independent Study in Theatre Arts	AOIT210 Digital Media	CC Family & Consumer Science	Cosmetology II	Religion Related
Japanese IV	Physical Science		Visual Arts (K-8)	AOIT220 Programming II	Early Childhood Education I	Trade and Industrial Cooperative Training I	SAT Preparation
Russian I	Biology		Visual Arts I (9-12)	CC Business Technologies	Early Childhood Education II	Trade and Industrial Cooperative Training I	Teacher Cadet I
Russian II	Biology II (2nd Yr)		Visual Arts II (9-12)	Keyboarding	Culinary Arts and Hospitality I	Law Enforcement I	Teacher Cadet II
Arabic I	Anatomy		Visual Arts III (9-12)	Digital Communications Systems	Culinary Arts and Hospitality II	Law Enforcement II	Library/Media Assistance
Latin I	Anatomy And Physiology		Visual Arts IV (9-12)	Business and Electronic Communications	Family & Consumer Sciences Apprenticeship	CC Trade & Industrial	Special Interest Topics (Mini-Courses)
Latin II	IB Biology III		Fine Crafts (9-12)	BE - Apprenticeship Program	Family & Consumer Sciences Cooperative Program	Scientific & Technical Visualization I	Sports Medicine/Athletic Training
Latin III	Animal Behavior		Ceramics (9-12)	Business Cooperative Program	Family & Consumer Sciences Internship	Scientific & Technical Visualization II	CASEE (Curriculum Assistance & Skills For Employ)
Latin IV	Botany		Graphic Design (9-12)	Business Internship	Family & Consumer Sciences Advanced Studies	Printing Graphics I	Extended Day Diversified Cooperative Training
Exploratory Languages	Genetics		Photography (9-12)	Business Advanced Studies	Biomedical Technology	Printing Graphics II	Career Training for Exceptional Children
Other Foreign Languages I	Microbiology		Film Production (9-12)	Principles of Business & Personal Finance - ME	Exploring Biotechnology	Drafting I	Internship
Other Foreign Languages II	North Carolina Wildlife		Electronic Art (9-12)	Marketing Pilot Program	Health Occupations Pilot Program	Commercial Art I	IBTheory of Knowledge
Other Foreign Languages III	Zoology		Art History (9-12)	Small Business/ Entrepreneurship - ME	Health Team Relations	Commercial Art II	Virtual High School Courses
Other Foreign Languages IV	Life Science		Art History and Appreciation	Marketing	Allied Health Sciences I	Digital Media I	Community College Courses
Community College Language Lab	Earth/Environmental Science		Studio Art: Drawing (9-12)	Marketing Management	Allied Health Sciences II	Digital Media II	University Courses

Language Arts and Foreign Language	Math; Computer Science; and Science	Social Studies	Arts	Business	Agriculture; Family & Consumer Sciences; and Health	Trades & Technology	Other Courses
Elementary School French	Earth Science		Studio Art: 2D Design (9-12)	Strategic Marketing	Medical Sciences I	Photography I	Community College Language Arts
Elementary School Chinese	Ecology		Studio Art: 3D Design (9-12)	Fashion Merchandising	Medical Sciences II	Photography II	
Elementary School Japanese	Environmental Science		Independent Study In Visual Arts	Travel/Tourism & Recreation	Medical Sciences III	Programming And Broadcasting I	
Elementary School Spanish	Geology		Folk Arts (K-12)	Sports & Entertainment Marketing I	Proj Lead the Way- Principles of Biomedical Science	Programming And Broadcasting II	
Middle School French	Marine Science		Community College Arts	Sports & Entertainment Marketing II	Proj Lead the Way- Human Body Systems	Programming And Broadcasting III	
Middle School Chinese	Oceanography			AOHT105 Introduction to Hospitality and Tourism	Health Occupations Ed Special Interest	Drafting - Architectural II	
Middle School Spanish	Chemistry			AOHT120 Hospitality	Health Science Apprenticeship Program	Drafting - Architectural III	
Middle School German	Chemistry II (2nd Yr)			Marketing Education Special Interest	Health Careers Internship	Drafting - Engineering II	
Middle School Japanese	IB Chemistry III			Marketing Cooperative Program	Health Science Advanced Studies	Drafting - Engineering III	
Middle School Latin	Physics			Marketing Internship	University Health Services	Networking I - Trade & Industrial	
French VI	Physics II (2nd Yr)			Marketing Advanced Studies	Community College Health/Human Services	Network Engineering Technology II - Cisco	
Chinese V	IB Physics III					Network Engineering Technology III - Cisco	
Spanish VI	AP Physics B					Computer Engineering Technology I	
German VI	AP Physics C					Computer Engineering Technology II	
Japanese V	Astronomy					Trade & Industrial Special Interest	
Japanese VI	Aviation Science					Trade & Industrial Apprenticeship Program	
Latin V	Space Science					Trade & Industrial Cooperative Program	
Latin VI	NCSSM (O) Green Environmental Geology					Trade & Industrial Internship	
Other Foreign Language V	Special Interest Science					Trade & Industrial Advanced Studies	
Spanish I For Native Speakers	Photography In Science					Technology Advanced Studies	
Spanish II For Native Speakers	Community College Science					Scientific & Technical Visualization I	
Community College Languages						Scientific & Technical Visualization II	
						Scientific & Technical Visualization III	
						Technology Education Pilot Program	
						Principles of Technology I	
						Principles of Technology II	
						Physics/Principles of Technology II	