

Plano ISD Council

PTA[®]

everychild. one voice.[®]

2008-09 Advocacy Project

Mission of National PTA

PTA is:

- ◆ A powerful voice for all children,
- ◆ A relevant resource for families and communities,
- ◆ A strong advocate for the education and well being of every child.

**Have you heard
the term 4 x 4?**

What is it?



The new Texas high school graduation requirements include:

4 years of 4 classes (4 x 4)

- English
- Social Studies
- Math
- Science

In effect as of 2007-2008 for 9th graders.

No change to English or Social Studies requirements.

Increases Math and Science from 2 years to 4 years for all students.

That sounds good!

National PTA supports...

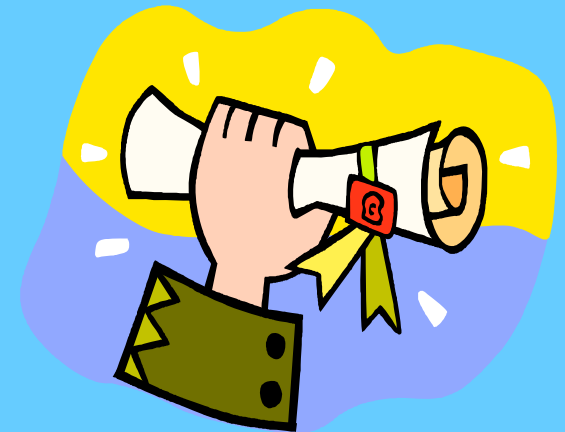
**emphasis on science and math
(and technology).**

**But do the graduation
requirements
meet the needs
of all students?**



4x4

High School Diploma Plans



4x4 High School Diploma Options



Minimum Plan – 24 credits

Recommended Plan – 26 credits

Distinguished Plan – 26 credits

Recommended Plan

- 4 years of English
- 4 years of social studies
- 4 years of math
- 4 years of science

- 2 years foreign language
- other required courses/electives



= 26 Credits

Distinguished Plan

- Same as Recommended Plan
- Adds a third year of foreign language
- Must show evidence of four indicators of advanced measures:
 - AP/IB classes
 - 3.0 in concurrent enrollment classes
 - PSAT score or
 - Research project

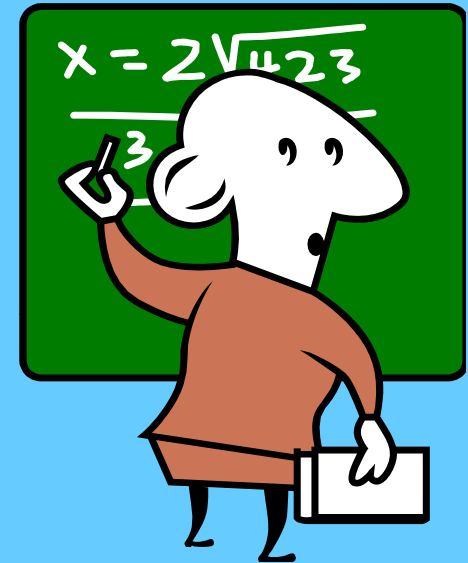
= 26 Credits



What is included in the 4 years of Math?

Required Courses:

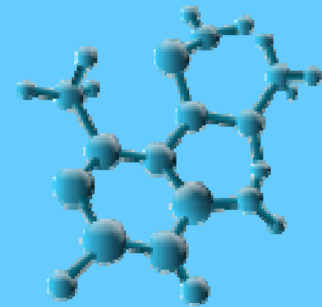
- Algebra 1
- Algebra 2
- Geometry
- Choose between: AP or IB math, concurrent enrollment in college math, pre-calculus, math models (*must be taken prior to Algebra II*) or math independent study



What is included in the 4 years of Science?

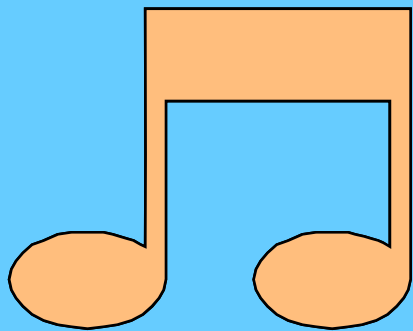
Required Courses:

- Biology
- Chemistry
- Physics (or Principles of Technology - not offered in PISD)
- 4th year – list of laboratory-based classes





What about electives in four years of high school?



Recommended Degree Plan

3.5 electives

Distinguished Degree Plan

2.5 electives

1 credit = 1 class for the school year

.5 credit = 1 class for the semester

Electives – What to take?

If a student wants to take an elective throughout his high school career (called a strand), he can only fit one into his schedule.

Strand = one elective taken for all 4 years of high school

What Classes Are Electives?

Creative Writing...Art II, III, AP Art 2D, AP Art 3D, AP Art Drawing Portfolio, Art History...String, Philharmonic & Symphony Orchestra II, III, IV, Concert, Jazz & Symphonic Band II, III & IV, Wind & Instrument Ensemble II, III & IV, Concert, Mixed, Tenor/Bass, Treble, Vocal Ensemble & Jazz Show Choir II, III & IV, Music Theory, AP Music Theory...Theater Arts II, III, IV, Technical Theater II, III, IV, **Theater Production II, III, IV**...Dance II, III, IV...Chinese III, IV, French III, IV, **AP French**, German III, IV, Latin III, IV, Spanish III, IV, AP Spanish...AP Comparative Government, **AP European History**...Psychology, **AP Psychology**, Sociology I, II...Introduction to Radio and Television...Debate I, II, III, Oral Interpretation I, II, III...Animal Science, Canine Science, Equine Science, **Exploring Aquaculture Science**, Introduction to Veterinary Technician...Floral Design and Interior Landscape Development, Floral Design II...Introduction to Horticulture Science, **Landscape Design, Construction & Maintenance**, Personal Skill Development in Agriculture, Plant and Animal Production...Veterinary Medical Assistant I, II, **Wildlife and Recreation Management**, Home Maintenance & Improvement...Interior Design, Advertising Design I, II, Fashion Design I, II, Fashion Marketing, Introduction to Advertising...**Business Connections**, Business Education Career Preparation, Business Law, International Business...Child Development, **Early Childhood Professions I, II**...Introduction to Medical Science Careers, Patient Care Technician with Texas CNA Certification...Career Studies, **Management, Entrepreneurship**, Sports and Entertainment Marketing...Food Science & Technology, **Nutrition & Food Science**, Sports Nutrition...Personal & Family Development, Preparation for Parenting...AP Computer Science, **Cisco CCNA I, II, III & IV**...Criminal Investigations

What states offer only one single path to high school graduation? Only Texas

8 states have mandated recommended curriculum of (4 English, 3 math, 3 science, and 3 social studies) for all students but **none of them have implemented it.**

- AR (2010)
- DE (2011)
- IN (2011)
- KY (2012)
- MI (2011)
- MN (2015)
- SD (2010)
- TX (2008)

As high school graduation requirements have increased, has this helped our college students become more successful?

NO

Students are becoming less likely to complete a degree within five years.

Students who do obtain degrees are taking longer to do it.

Texas Ranking in U.S.

- **50th in % of Population over 25 with a High School Diploma**
- **40th in Expenditures Per Student**
- **35th in High School Graduation Rate**
- **12th in % of School Funding from Local Revenues**
- **5th in % of Children Living in Poverty & Teenage Birth Rate**
- **4th in % of Population Under 18**
- **3rd in Rate of Incarceration, Percentage of People Living Below Federal Poverty Level, Percentage of Population that is Malnourished**
- **2nd in Public School Enrollment & Birth Rate**
- **1st in % of Uninsured Children**

Source: Texas On The Brink

**What can we do
to help the students
of Texas?**

**Plano ISD Council of PTAs
has adopted
an advocacy project
to expand the degree choices
offered to high school students**

Advocacy Statement

To secure additional, rigorous high school diploma degree plan choices that recognize individual student's natural talents, interests and abilities and prepare all students for a variety of career and continuing education aspirations.

Practical Problems of 4x4

5 Practical Problems of 4x4

- #1 - Will cause dropout rate to go up further**
- #2 - Students will enroll in less Fine Arts, Athletics, Technology and Vocational education classes**
- #3 - No allowance for natural talents and interests**
- #4 - Not enough certified math or science teachers**
- #5 – No Texas college or university requires 4 years of Math and Science for admission & 4x4 is not essential to the majority of the largest and fastest growing occupations in the U.S.**

#1 - Dropout Rate Goes Up

Already, the drop out rate in Texas is increasing.

2004 3.9%

2005 4.3%

2006 8.8%

2006 Dropout Rate in PISD: 2.8%

What will the effect of dropping out be on the lives of students?

What will the effect be on our community and state?

Source: TEA website, AEIS Report

Why Do Students Dropout?

61% of high school dropouts left school because they were bored and saw no relevancy in what they were studying.

60% percent were unemployed when they dropped out.

Source: American College of Education

What is Portrait of a Dropout?

- 4x more likely to be arrested.
- 19x the incarceration rate of a college graduate.
- 85% of the prison population dropped out of high school.
- Almost 50% of heads of households that have dropped out are on welfare.
- Have 8x the poverty rate of college graduates.



What is Portrait of a Dropout? continued

- Significantly higher drug and alcohol abuse rate.
- Live 9.2 fewer years than high school graduates.



- 57% less likely to vote.



- Their children are more than 50% less likely to go to college.

Graduation Rates for ALL students of ALL ethnicities are DROPPING

The change ranges from Native American with .4% decrease to African American with 7.2% decrease in graduation, with Caucasian, Asian and Hispanic somewhere in between those numbers.

Hispanic students had the lowest graduation rate at 71.7%. Hispanics account for **40%** of Texas students.

What is fueling the dropout rate?

- Numerous second language learners
- Fewer choices for students
- Bar for TAKS testing goes up every year
- Rapidly growing economically disadvantaged population

#2 - Fewer Fine Arts and Non-Core Education

- Students will be able to only select one strand of electives throughout their high school career
- Currently, over 50% of Plano ISD students in middle-high school take an elective fine arts class.
- 75% of JROTC graduates in Plano ISD have continued to college and 20% have continued to military service. But to continue in JROTC, students pursuing the Distinguished plan would only be able to take ONE semester of any elective in HS.

Burden to Continue Elective Programs

Students seeking to take electives beyond a 4-year strand or who wish to have two 4-year strands, can:

1. Pay for **summer school** to complete required credits (will they be able to have an employment experience and academic break as well?)
2. Pay for **e-school or concurrent enrollment at community college** to complete required credits (will they add this additional class to their already full fall or spring course load and can they handle the stress and academic load?)

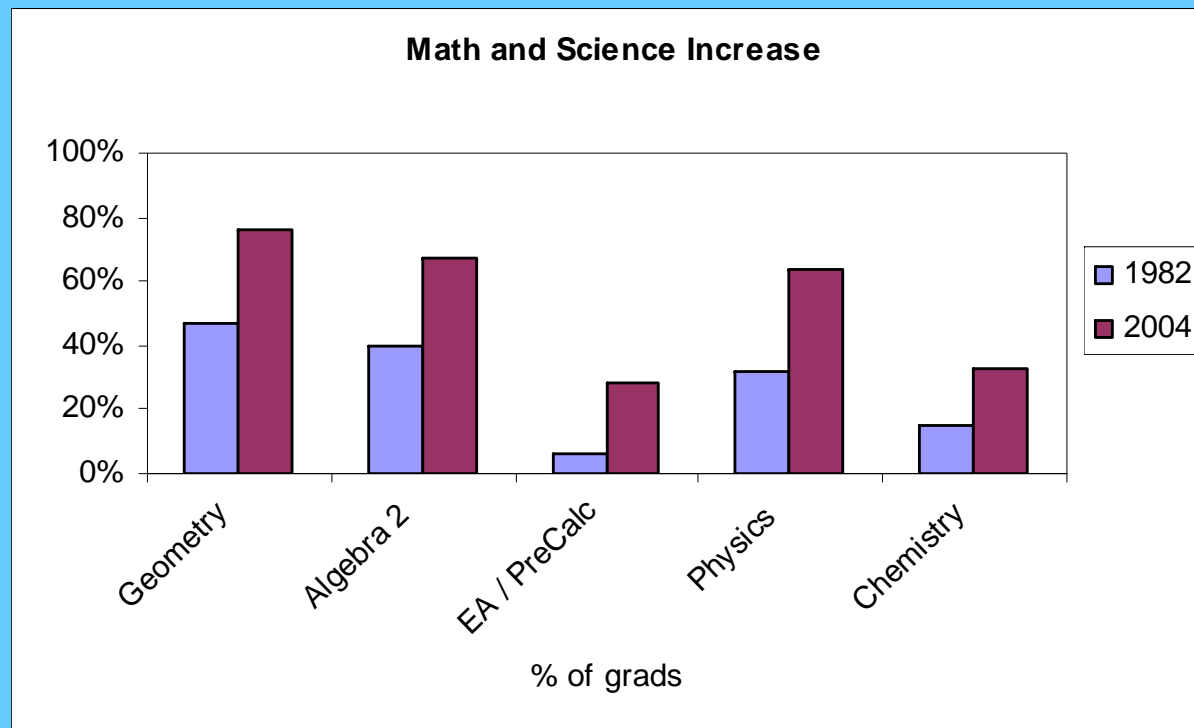
Do students have the resources to pay for these classes?

Do students have the motivation to enroll and succeed in the classes?

#3 - Natural Talents & Student Interest

Good News!

High school students are taking more math/science without 4x4



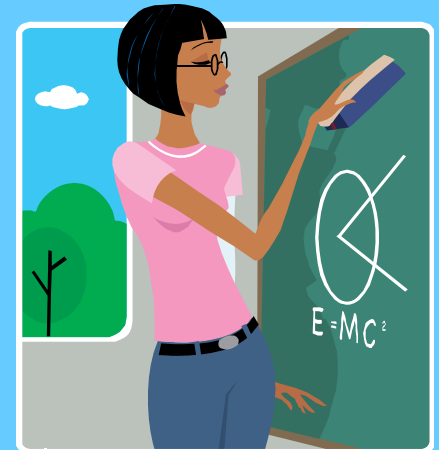
Source: NCES – 2007 Condition of Education – Special Analysis High School Course Taking

Natural Talents & Student Interest

- Not all students excel at math and sciences, but have needed and important talents and abilities
- Students should pursue an education that will prepare them for their future – and **not every future involves further education in math or science**

#4 - Not enough certified math or science teachers

- 28,445 Teaching certificates granted last year in Texas
- 1,654 in math (6%)
- 1,373 in science (5%)
- Since 2004, the average percentage of Texas high school teachers teaching “out of field” in math is 15%, for science it is 27%.



Who will be teaching 4x4 required high school math and science classes?

#5 - 4x4 is not compulsory for admission to any Texas college or university

Of the Top 5 Universities listed by US News and World Report last year, only **Harvard** requires 4 years of Math and 4 years of Science!

University	U.S. News and World Report 2007 Rank	Math	Science
Top 5 National Universities in U.S. News and World Report College Rankings			
*Princeton	1 st	4	3
*Harvard	2 nd	4	4
**Yale	3 rd	N/A	N/A
California Institute of Technology	4 th	4	2
*Stanford	5 th	4	3
Top 6 Texas Schools appearing in the U.S. News and World Report College Rankings			
**Rice University	17 th	N/A	N/A
University of Texas at Austin	47 th	3	2
Texas A&M University	60 th	3.5	3
**Southern Methodist University	70 th	N/A	N/A
Baylor University	81 st	3	2
Texas Christian University	105 th	3	2
Additional Selected Texas Public Universities			
University of Texas at Dallas	N/A	3.5	3
University of Houston	N/A	3	2
University of Texas at El Paso	N/A	3-4	3
*Texas Tech University	N/A	3	2

* These schools recommend, but do not require specified high school courses.

** These schools do not provide any guidelines, recommendations, or requirements for specified high school courses.

**4x4 is not essential to the majority
of occupations projected to
comprise the future job market**

Bureau of Labor Statistics

**Jobs with fastest, largest or highest rate
of growth** between 2004 and 2014

more than 60% of those new jobs will not
require college.

**Only four of those 44 occupations have
substantial mathematical requirements
(requiring college level math).**

The increase in jobs that DO require postsecondary education credentials will continue a very gradual increase, staying consistent with data from the past 60 years:

<u>Year</u>	<u>Jobs Requiring Postsecondary Education</u>
2004	29%
2014	31%

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We would like to see the following expansion:

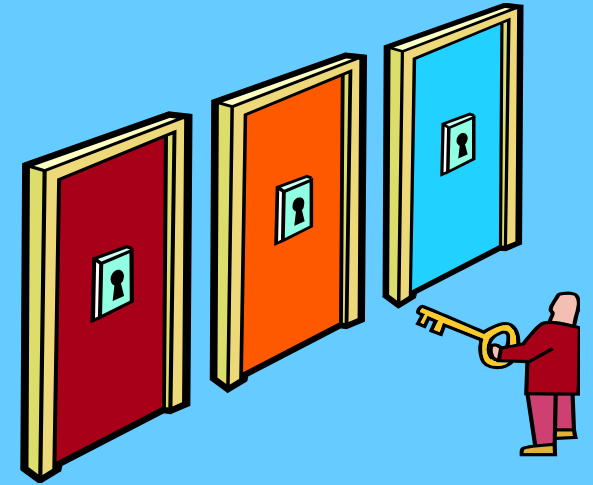
Additional Degree Plans:

- Keep Recommended degree plan, but change name to STEM track (science, technology, engineering and math)
- Add two additional tracks. One to focus on **Humanities/Fine Arts**, the other to focus on **Career Exploration** These tracks would not require 4 years of math or science.
- Allow students in each of the 3 tracks to voluntarily add the Distinguished degree designation by completing a 3rd year of foreign language and mastering 3 AP/IB course exams.

Rigor in all classes

- We support academic excellence in all classes.
- Career Preparatory classes can and should be rigorous, leading to certifications that students can utilize as they become employed.
- Fine Arts students should be expected to participate in juried competitions, UIL concerts and contain challenging content.

Choices



- Students and consumers today demand more choices, not less.
- We have over 200 choices of TV channels. The 4x4 offers little choice, which doesn't make sense in our "on-demand" age.
- **The way to engage students is to allow them to select courses that interest and inspire them to create and achieve their own life's dream.**

Natural Talents, Interests and Abilities

- One size does not fit all!
- Recognize research about different aptitudes and abilities.
- There is honor and value in all work, not just math and science.



Prepare for Career or Continuing Education

- Students who have the goal to go to college should have the choice of pursuing high school degree plans that enhance their educational interests and goals and prepare them to perform at the university level.
- Students who wish to pursue other post-high school education and training should have a solid basis of knowledge and exposure to the subjects to be prepared to excel.
- Students who wish to join the workforce immediately should leave high school with valuable certifications to compete in the Texas job market.



Our Goal

- To **INFORM** the 36,000+ PTA members of Plano and 600,000+ PTA members of Texas about the 4x4 requirements
- To **EDUCATE** the PTA members about expanding the degree plan options and the legislators that are working to expand choices for our students
- To **ENGAGE** PTA members to make their voices heard on this issue in the Texas House and Senate

National PTA's response:

Although National PTA supports STEM (Science, technology, engineering, and math) education because the 21st century requires it, arts and humanities still need to be a part of the whole component.

If one is being sacrificed for the other, then National PTA cannot support that effort.