

NTH@C NEW TECH HIGH COPPELL

FRESHMAN COURSE GUIDE 2009 – 2010

NTH@C Schedules

The NTH@C schedule is a flexible, learner-driven, college-style modular schedule. The school day and week was designed using 20-minute modules and the entire day will consist of several of these modules combined in a variety of ways for each course. In other words, depending on the nature of the course, it may be 3 or 4 modules in length rather than the “one size fits all” of a traditional high school schedule. Because learners enter high school with different credits, the example below is only a sample of a schedule for an NTH@C freshman.

Sample NTH@C Learner Schedule

MODS	TIME	SAMPLE SCHEDULE
1	8:40 - 9:00	Spanish I
2	9:00 - 9:20	
3	9:20 – 9:40	
4	9:40 - 10:00	Biotech Ethics
5	10:00-10:20	
6	10:20 – 10:40	
7	10:40 - 11:00	Digital Portfolio I
8	11:00 - 11:20	
9	11:20 - 11:40	
10	11:40 - 12:00	Lunch
11	12:00 - 12:20	Algebra I
12	12:20 - 12:40	
13	12:40 - 1:00	
14	1:00 - 1:20	Global Issues
15	1:20 - 1:40	
16	1:40 - 2:00	
17	2:00 - 2:20	
18	2:20 - 2:40	PE
19	2:40 - 3:00	
20	3:00 - 3:20	
21	3:20 - 3:40	Independent Study
22	3:40 - 3:45	Announcements

2009 - 2010 Courses

NTH@C courses are delivered through project learning and customized to learners' academic and career interests. Project learning includes accessing a variety of resources and technological tools for information, collaborative problem-solving and reflective self and peer evaluation (21st century skills). In each course, learners will be evaluated on content knowledge along with 21st century skills such as collaboration, communication, and critical thinking.

2013 Graduates

GLOBAL ISSUES

Credit(s): 2	Weight	Pre-requisites
English I and World Geography	Level 3	None

Global awareness and an awareness of how you fit into the world are the cornerstones of this course. You will be immersed in a study of current world issues, their origins, and possible solutions and will develop skills typically gained from world geography and English I as you encounter and solve problems with your peers. You will compare customs and traditions of different world cultures along with identifying nations' locations and historic backgrounds. You will study and analyze literature related to the world cultures, and you will develop interpretive analysis skills through the readings. You will write narrative, descriptive, and expository compositions of varying lengths while utilizing the revision process, grammar, mechanics, word processing, and the research process. This course prepares learners for study toward the AP exams in world history and language arts.

ALGEBRA I

Credit(s): 1	Weight	Pre-requisites
Algebra I	Level 3	None

Algebra expands the algorithmic skills of arithmetic to algebraic skills. It continues to develop the set of real numbers as a mathematical system, focusing on linear equations and inequalities, operations with polynomials, and solving problems. This course will emphasize the study of linear functions. You will use functions to represent, model, analyze, and interpret relationships in problem situations. You will develop an understanding of the connection between symbolic language and real world applications. It includes the study of function families and multiple representations of them, various solution strategies for systems of equations, operations with radicals, and graphing skills. You will also use a variety of representations (concrete, pictorial, numerical, symbolic, graphical, and verbal), tools, and technology (including, but not limited to, calculators with graphing capabilities, data collection devices, and computers) to model mathematical situations to solve meaningful problems.

GEOMETRY

Credit(s): 1	Weight	Pre-requisites
Geometry	Level 3	Algebra I

Geometry consists of the study of geometric figures of zero, one, two, and three dimensions and the relationships among them. In this course, you will use spatial reasoning and geometric thinking to understand mathematical concepts and the relationships among them as you solve problems involving properties and relationships having to do with size, shape, location, direction, and orientation of these figures. You will use your understanding of the connection between geometry and the real and mathematical worlds and use geometric ideas, relationships, and properties as well as solve meaningful problems by representing figures, transforming figures, and analyzing and proving relationships, and use a variety of representations (concrete, pictorial, numerical, symbolic, graphical, and verbal), tools, and technology (including, but not limited to, calculators with graphing capabilities, data collection devices, and computers).

DIGITAL PORTFOLIO I

Credit(s): 1	Weight	Pre-requisites
Tech. Apps (1)	Level 3	None

This course introduces you to design principles, composition, imaging techniques, typography principles, animation and sound-creating and editing. You will have the opportunity to develop skills in illustration, image manipulation, screen design and animation as you develop your digital portfolio. You will practice taking pictures with a digital camera, importing images from the internet as well as using a scanner for hand drawings, and you will develop competencies in the use and applications of industry-standard software by creating projects for print, presentation and Internet. The skills learned in this course will also prepare you to produce projects in all your courses.

DIGITAL PORTFOLIO II/ MULTIMEDIA

Credit(s): 1.5	Weight	Pre-requisites
CTE (1) + Fine Arts (1)	Level 2	None

This course builds on your technological expertise to expand knowledge and skill in the areas of design principles, composition, imaging techniques, typography principles, animation and sound-creating and editing. You will have the opportunity to develop skills further in illustration, image manipulation, screen design and animation as you develop your digital portfolio. You will also explore what it takes personally, technologically, and financially to start your own business. You will study business and economic environments to discover new business opportunities, risks, and challenges in local and/or international ventures. You will use the principles of business and marketing, the concepts of economics and free enterprise, and the understanding of human resource skills that an effective marketer must possess to solve problems and create projects

SPANISH I/II/III

Credit(s): 1	Weight	Pre-requisites
Foreign Language	Level 3	Must be taken in sequence

Learners in Spanish I concentrate on speaking and understanding simple non-technical sentences, and writing and reading with an emphasis on simple grammar patterns and topical vocabulary in the language. Basic cultural customs and differences will be introduced.

Spanish II will expand the use of the skills of listening, speaking, reading, and writing. The instruction in grammar and vocabulary is designed to enable learners to read more difficult selections and prepare controlled composition. Oral proficiency demands increase. Cross-cultural studies are interfaced with the course.

Spanish III will increase listening and speaking skills to an oral proficiency level of low intermediate. Reading and writing skills will include composition, structure, current events, and an introduction to literature. Appreciation of cross-cultural skills continues.

BIOTECHNOLOGY ETHICS

Credit(s): 1.5	Weight	Pre-requisites
Biology (1) + Psychology (.5)	Level 3	None

In Biotech Ethics, you will develop an understanding of human behavior dynamics, group processes and individual differences while solving problems and developing projects around the investigation of the structure and functions of cells, including cellular growth, reproduction, genetics and simple, multi-cellular and complex life forms as well as the current issues and opportunities involving biotechnology advances. A learner must pass the Psychology CBE in order to receive credit.

PE /WELLNESS

Credit(s): 1	Weight	Pre-requisites
PE (1)	Level 2	None

During the wellness course, you will solve problems and develop projects with your peers involving mental, physical, and emotional health, personality, substance abuse, body systems, infectious and non-infectious diseases, STD's, human reproduction, safety and first aid as well as nutrition and physical fitness and the physiological factors involved in exercise that incorporate muscular strength and endurance, flexibility, and cardiovascular endurance. A learner must pass the Health CBE in order to receive credit.

INDEPENDENT STUDY

At NTH@C you are expected to plan, draft, and complete written compositions and project presentations on a regular basis. Independent Study time is used for working individually or with peers to utilize the technological tools available to research, plan, and create products. Freshmen typically have one 20-minute Independent Study period in their school day. For learners travelling to CHS for UIL athletics or fine arts, the Independent Study time is used to create travel time to and from Coppell High School.

NTH@C Graduation Requirements

The following table outlines the credits required to graduate under the possible graduation plans for learners entering high school in Texas during or after the 2007-2008 school year. **PLEASE NOTE: High school graduation requirements for the State of Texas have changed for incoming freshmen in the Fall of 2010. The CISD School Board has not yet finalized the new graduation requirements for our learners.** A learner entering NTH@C shall be on the DAP, unless the learner, the learner's parent/guardian, and a school counselor/administrator agree that the learner should be permitted to take courses under the recommended or minimum high school program.

Subject	Distinguished Achievement Program	Recommended Program	High School Graduation Plan {}
			
English/LA	4	4	4
Social Studies	3	3	2
Government	.5	.5	.5
Economics	.5	.5	.5
Math**	4◆	4◆	3⌘
Science	4	4⊛	2☺
PE	1.5	1.5	1.5
Health	.5	.5	.5
Other Languages	3 (same language)	2 (same language)	0
Computer Technology Applications 	1	1	1
Fine Arts	1	1	0
Communication Applications (Speech)	.5	.5	.5
<i>Electives</i>	2.5	3.5	8.5❖
<i>Other Measures</i>	<i>Please see "What is the Distinguished Achievement Program?"</i>		
TOTAL	26	26	24

◆ Algebra I, Geometry, Algebra II, +1 Additional Math Credit from TEA/CISD approved list OR Algebra I, Geometry, Math Models, Algebra II

⌘ Algebra I, Geometry

⊛ Biology, Chemistry, Physics, + 1 Additional Science Credit from TEA/CISD approved list

☺ Biology, Chemistry or Physics

❖ One of the electives must be from World History, World Geography or Science

 Technology Credit

 Learners graduating under these two graduation plans are eligible for the Texas Grant. For more information about the Texas Grant, contact www.collegefortexans.com.

{ } The Texas Education Agency is still in the decision making process regarding what will or will not be included as a part of the graduation requirements on the minimum plan. This is a tentative graduation plan.

- It is the responsibility of the learner and the parents to confer with the counselor or the director and to know how many credits the learner has earned and how many are needed for graduation.
- Learners who complete graduation requirements early may participate in spring graduation exercises (they may participate in senior activities with the approval of the director). Those who wish to graduate early should file a graduation request in advance with the counselor.

- The 1.5 units of physical education may be waived for participation in two 3-hour career and technology co-op classes.
- Correspondence Courses (Distance Learning) are an option for required or elective courses. Only two credits of correspondence are allowed per district policy. Correspondence Course credits along with credits earned by credit by examination (CBE) or acceleration are not figured into GPA. These grades also do not replace any existing grades.

TAKS

State law mandates that learners must also pass all sections of Texas Assessment of Knowledge and Skills (TAKS) to receive a Texas diploma. Exit level TAKS will be administered to 11th grade learners beginning with the 2003-2004 school year.

NTH@C learners are also required to complete the following prior to graduation:

- 12 hours of college credit
- 40 hours of community service
- Digital Portfolio
- Career Experiences (Such as job shadowing and job internship experiences)
- Senior Capstone Experience

What is the Distinguished Achievement Program?

The Distinguished Achievement diploma is the most prestigious diploma in the state of Texas. The graduate who earns distinguished achievement completes a rigorous program of study in pursuit of a high school diploma that is a stepping stone to continued higher education. The requirements for completing the DAP pathway are listed below:

1. The learner must complete the coursework (credits) of the DAP graduation plan. The learner will be a DAP candidate until all requirements are verified.
2. The learner must pick up a Distinguished Achievement Application and Learner Checklist from the counselor. It is important that he/she meet the deadlines on the application and checklist.
3. The learner must also achieve any combination of four of the following advanced measures. Original research/projects may not be used for more than two of the advanced measures. The measures must focus on demonstrated learner performance at the college or professional level. Learner performance on advanced measures must be assessed through an external review process.

Measure 1--original research/project that is:

- Judged by a panel of professionals in the field that is the focus of the project; or
- Conducted under the direction of a mentor(s) and reported to an appropriate audience; it is the learner responsibility to secure a mentor to serve as a partner for the original research/project; and
- Related to the required curriculum set forth in the Essential Knowledge and Skills base for the state of Texas.

Measure 2--test data where a learner receives:

- A score of three or above on The College Board Advanced Placement examination;

Measure 3--a score on the Preliminary Scholastic Assessment Test (PSAT) that qualifies a learner for recognition as Commended or higher by the National Merit Scholarship Corporation; as part of the National Hispanic Scholar Program of the College Board; or as part of the National Achievement Scholarship Program for Outstanding Negro Learners of the National Merit Scholarship Corporation. The PSAT score may count as only one advanced measure regardless of the number of honors received by the learner; or

Measure 4--college courses with a grade of 3.0 or higher on courses that count for COLLEGE CREDIT, including any tech-prep courses. Tech Prep (preparation for high-technology careers)

There can be NO substitutions allowed in the Distinguished Achievement Program. See DAP FAQ at <http://www.tea.state.tx.us/gted/dapfaq.html#q2>.