Investigating Geometry On-Line (IGO)

This information will be presented by the instructor at Summer School orientation on June 3rd at Tucker High School from 6:00-7:00.

INSTRUCTOR:
Ms. Vicki Hiner
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Online information: http://blogs.henrico.k12.va.us/math/programs-2/

DESCRIPTION

Investigating Geometry On-Line (IGO) is an interactive electronic geometry class, using computer technology and the Internet to explore and discover the principles and concepts of geometry. Students in Investigating Geometry On-Line (IGO) will explore geometric figures using computer software, practice geometric skills through problem-solving activities on paper, explore applications of geometry through the World Wide Web, and create projects using these technologies.

At any hour of the day, students interact with the website, read notes, take on-line quizzes and tests, work on assignments and projects, then submit work to be graded. The teacher evaluates student work and sends back grades and comments. Only through continuous communication can students be successful in an on-line course. The primary communication method between the teacher and students is email. The teacher will have limited office hours for students to come in or phone to check on their progress or answer questions.

While students are welcome to work ahead, they must maintain a minimum pace to remain in the course. The weekly minimum work requirements are listed in the course schedule. Students have until ______ to complete the course and take the state mandated SOL test. It is essential that the student and instructor maintain regular contact. Parents should monitor their child's progress completing their coursework. Failure to complete assignments on a consistent basis will result in students being removed from the course.

COURSE SOFTWARE

HCPS has installed all the plug-ins and software need for this course on the HCPS laptops. If the student is using other computers to complete this course, they may need to install plug-ins and software. The following plug-ins and software may be required to view certain types of class materials, or play video, and animations on certain web pages.

- Java (latest version)
- PDF Reader such as Adobe Acrobat Reader
- Macromedia Flash Player
- Macromedia Shockwave
- Power Point Presentation Viewer
- QuickTime Player
- ExamView Player
- Geometer's Sketchpad (geometry software)
- C.a.R. (java-based, geometry software)
- GeoGebra (java-based, mathematics software)
COURSE EXPECTATIONS

The topics that we will study in Investigating Geometry On-Line (IGO) are the Virginia Geometry SOLs and can be found at http://schoolspace.henrico.k12.va.us or on the course home web page at http://teachers.henrico.k12.va.us/math/igo/. The web pages are the basic "textbook" for the course and includes 5 kinds of materials:

Investigating Geometry On-Line (IGO)

1. Notes: information (reading and example problems) in the Power Point, Sketchpad, Online Video, and other web pages.
2. On-line skill study sheets with click-able buttons that will score and reveal answers.
3. Interactive activities using Geometer’s Sketchpad (GSP), C. a. R., and GeoGebra software. After exploring the activity as described on the web pages, there are questions to be answered and recorded in your notebook or sent to your instructor.
4. PDF files that are downloaded by the student, read and completed. Some will be sent to the instructor for grading.
5. On-line quizzes and tests. The mid-term and final exams are taken on site (see course schedule).

Students are required keep a notebook containing pages of their work as they go through the course. Place these pages into a notebook organizing them sequentially as you progress through the topics. Your pages will be:

1. Your hand-written completed work to include notes and solutions to classwork problems.
2. Interactives (GSP, C.a.R. and GeoGebra ). These pages must include notes that you write as you do the activities, questions that you have, discoveries that you make, and ideas that you have.

You are expected to do the work as follows:

1. First, do the computer activities as assigned and answer the questions in your notebook as you go, writing notes and thoughts about them in your notebook.
2. Read the lecture notes and definitions as listed in each lesson.
3. Email the instructor any questions you have not been able to answer yourself.
4. Do the skill worksheets (classwork first, asking questions as you have them, then homework, submitting this to be graded) on the web pages.
5. Complete quizzes in each lesson after homework has been returned.
6. When all work for a unit has been completed, the unit test will be taken and submitted.
7. Move on to the next unit.

Tests will be administered approximately every three days (see course schedule) and posted at http://www.schoolspace.henrico.k12.va.us. All tests may be cumulative, covering everything you have learned so far, but emphasizing the most current work.

STANDARDS

Content standards for this course conform to the mathematical standards published by the Virginia Standards of Learning (SOL).
[http://www.doe.virginia.gov/testing/sol/standards_docs/mathematics/]

All forms of academic dishonesty are prohibited. This includes, but is not limited to, plagiarism, cheating, furnishing false information, forgery, alteration or misuse of documents or software, and misconduct during a testing situation. Any student cheating on an exam will receive a zero on the exam and may be withdrawn from the class at the instructor's discretion.
Performance Standards: Your grade in the course will be based on your participation as shown:

Notebook 10%
Homework 25%
Quizzes 25%
Tests 40%

Notebook:
- This is where classwork problems are to be worked out, notes on lessons are kept, and also where your writings with thoughts and notes on the interactive activities will be written.

Homework:
- Completing the assignment and emailing to the instructor for grading.
- Work the classwork problems prior to the homework problems as this can lead to questions that may needed to be asked of the instructor prior to completing the homework. Answer keys to the classwork problems will be posted on line with work shown.
- Homework for the lesson is to be completed and submitted before completing the quizzes

Quizzes:
- Completing each quiz that follows each section of the unit being worked.
- Reviewing the graded quiz and communicating with the instructor on problems missed on the quiz prior to taking the unit test.
- All quizzes are to be completed before the unit test is taken.

Tests:
- Taking the tests by the due date listed on the course schedule, one per unit.
At a minimum, students are required to work in their on-line course at least six times a week, (4-5 hours per day). This course requires diligent work and time management on your part. It may take some longer than others to complete assignments, but you and your parents are responsible for maintaining the above time line.

The Completion Date is the date the Unit Test will be posted. After 72 hours the test will expire. The Selected Activities, Homework and Quizzes are to be submitted prior to the taking of the Unit Test for grading. Assignments will be posted on schoolspace.

<table>
<thead>
<tr>
<th>Begin Date</th>
<th>Topic</th>
<th>Item</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 3</td>
<td>Orientation: Tucker High School, Room 101, 6:00 p.m. - 8:00 p.m.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| TBD        | Unit I: Basic Terminology | 1. Selected Quizzes  
2. Student Response to Selected Activity  
3. Online Test #1 |                 |
| TBD        | Unit II: Logic and Parallel Lines | 1. Selected Quizzes  
2. Student Response to Selected Activity  
3. Online Test #2 |                 |
| TBD        | Unit III: Triangles & Polygons | 1. Selected Quizzes  
2. Student Response to Selected Activity  
3. Online Test #3 |                 |
| TBD        | Unit IV: Congruent Triangles | 1. Selected Quizzes  
2. Student Response to Selected Activity  
3. Online Test #4 |                 |
| TBD        | Unit V: Similarity | 1. Selected Quizzes  
2. Student Response to Selected Activity  
3. Online Test #5 |                 |
|            | Review for Midterm Exam: TBD |                  |                 |
|            | Midterm Exam Units I – V: Tucker High School, June 27, 2013, 10:00 a.m. |         |                 |
| TBD        | Unit VI: Quadrilaterals | 1. Selected Quizzes  
2. Student Response to Selected Activity  
3. Online Test #6 |                 |
| TBD        | Unit VII: Right Triangles | 1. Selected Quizzes  
2. Student Response to Selected Activity  
3. Online Test #7 |                 |
| TBD        | Unit VIII: Circles | 1. Selected Quizzes  
2. Student Response to Selected Activity  
3. Online Test #8 |                 |
| TBD        | Unit IX: Geometric Solids | 1. Selected Quizzes  
2. Student Response to Selected Activity  
3. Online Test #9 |                 |
| TBD        | Unit X: Special Topics | 1. Selected Quizzes  
2. Student Response to Selected Activity  
3. Online Test #10 |                 |
|            | Review for EOC-SOL Test and Final Exam: TBD |             |                 |
|            | EOC - SOL Geometry Test: Tucker High School, July 29, 2013, 10:00 a.m. |         |                 |
|            | Final Exam Units VI–X: Tucker High School, July 31, 2013, 10:00 a.m. |         |                 |