

Computer Applications Contest - Frequently Asked Questions and Answers

- **Why should students participate in UIL?**

- UIL contests are designed to challenge students that desire more than the classroom basics and to encourage students to expand their skill set above and beyond the minimum requirements.
- Almost every walk of life uses computers in this day and age, and a strong understanding of word processing, spreadsheets, and databases is critical to success in many arenas.
 - College students use word processors to write papers and spreadsheets to analyze data to build charts and graphs for their papers. Many take notes on their computers and later sift and sort through notes to make study outlines. Research is often done via the Internet in conjunction with a word processor or spreadsheet program.
 - Most entry level jobs for high school graduates use computers in some form. Receptionists, secretaries, office assistants, medical personnel, research staff members, and more use computers as an integral part of their work day.
 - Jobs in which sales are involved often use computers to organize customer data and purchases by each customers as well as calculation of commissions earned. These are all accomplished using word processing, spreadsheets, and databases. Even jobs at a cash register are improved by an understanding of Computer Application as a cash register is connected to a computer, and an understanding of the computer allows a better understanding of any problems of the register.
- Skills learned in UIL Computer Applications enable a student to grasp concepts and improve their participation in other classes.
 - Functions in Excel and Access enable students to understand calculation of interest and payments, future value, present value, depreciation, and many more concepts taught in Accounting classes.
 - An understanding of Boolean logic in Computer Science is critical on the AP exam, and those students of Computer Applications grasp the elements that make up this logic: IF, NOT, OR, AND, TRUE, FALSE.
 - A background in Computer Applications gives students an understanding of the concept of parameters when math functions are introduced in Computer Science.
 - Access is built on tables with records. This concept of the data structure of records is easily grasped in Computer Applications and carries over into the idea of records in Computer Science. The same is true of sorting and filtering using queries.
 - Research papers or essays in many classes depend on using word processing and perhaps organizing data in a spreadsheet to present in a chart format.

- **How do I recruit and motivate students to participate?**

- The easiest participants to find are the ones that stand out in your BIM classes and show an interest in computers and their workings.
- With some schools not requiring BIM, coaches will have to look in multiple other arenas.
 - Get to know the 7th-8th grade technology teachers or keyboarding instructors and ask them to watch for interested students.
 - Review students in Computer Science classes and recruit them.
 - Ask your math department teachers to watch for students with good logical abilities in math who might be able to transition into Computer Applications.
 - Ask your existing students to watch and listen for students who might be good candidates for your team.
- Another important element is encouraging your students to keep participating in the Computer Application contest even after they are no longer in BIM class. Make it easy for them to practice and continue learning outside the classroom. Provide study materials they need and make computers available so that they can become skilled in this arena. Like all UIL contests, this is extracurricular. Science doesn't purport to teach everything tested in the Science Contest, likewise for Social Studies, Literary Criticism, Number Sense, Calculators, and even Spelling and Vocabulary. Almost all contests take students beyond classroom study.
- To keep students motivated, explain the value of going to Region and State Meets for college applications, talk about the phenomenal scholarships available thru TILF for students who attended State (one doesn't have to place, just attend). Consider team t-shirts, and for this you may need to get a local sponsor to pay for them. Give prizes for good work: a piece of candy, a gold star, etc.

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- **What is the Computer Applications Handbook, and why do I need to read it?**
 - Every coach and participant in the UIL Computer Applications contest should read and understand all the details in the *Handbook*.
 - Instructions for conducting a contest are in the *Handbook*, and students should be familiar with the procedure so that they will know what to do if there is a computer or printer malfunction or if the contest director forgets to give a tiebreaker or forgets to allow a preview period.
 - Document patterns for various letters, memos, and reports are spelled out, and students should know all the formatting details and margin information or should use the information to make templates or obtain templates for their computers. Invitational tests assume that students know the correct spacing and margins for all documents defined, and they are graded accordingly.
 - Details are included on which versions of Microsoft Office are acceptable for a given year.
- **When and how do I get started preparing a student for the Computer Application Contest?**
 - Start preparing as soon as you have identified potential competitors.
 - Get a copy of the *Computer Applications Handbook* from UIL for each of your participants. (It comes in the Computer Applications Study Packet with all tests used during the prior year.)
 - Have every student read the *Handbook* from cover to cover.
 - Learn the basics of Word, Excel, and Access to a degree that you are comfortable teaching these elements. Many need extra help in Access as it is less intuitive than the other applications.
 - Teach your students enough about Word, Excel, and Access to be able to create a document and print it in each of these applications as soon as possible.
 - Note that the BIM curriculum usually introduces Access in late spring, and this is too late for success in the Computer Applications contest.
 - Introduce it early, and enable those students that are motivated to learn more on their own time about all the applications by having study materials and old tests available for them to use.
 - Consider changing curriculum to introduce Word, Excel and Access in the fall, then revisit to expand the skill level after students are familiar with all three, and then approach Outlook and PowerPoint.
 - Make study materials available for students to learn in a self-paced manner, and have old tests available for student use to hone their skills.
 - Expand your students' knowledge in Word to basic areas.
 - Explain how templates work for various documents as specified in the *Handbook*.
 - Be sure all students have templates on their computers.
 - Teach basic knowledge of Headers that are used on almost all Word documents.
 - Explain paragraph formatting and spacing as well as tab setting.
 - Expand your students' knowledge in Excel to basic areas.
 - Teach a few basic functions and explain how to format a function and enter parameters.
 - Teach basic skills in creating a chart, and show them how to copy and paste a chart to Excel.
 - Have students take the prior year's Invitational A test for starters, and grade it with your students so that they will begin to understand the value of various elements.
 - Expand your students' knowledge in Access to basic areas.
 - Show them how to build a table in Design View, explaining the elements and formats used for text, numeric, and data and time fields.
 - Explain how to enter data in the Datasheet View.
 - Teach the Select Query explaining that it is a filtering process that allows a view of only records that qualify to be visible without creating a new table.
 - Teach the Update Query to use calculated fields to update a field in a table permanently (UIL has lesson plan that will be posted on their website for free download: *Lesson 3-Update Query and the Expression Builder*.)
 - Teach the use of the Report Wizard to create a simple report.
 - Add a label box to the report in the Report Header field for Student ID/Test ID.
 - Have students take the prior year's Invitational B test, and grade it with your students so that they will begin to understand the value of various elements.

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- Continue to teach more skills for Excel, Access, and even Word, and encourage students to work independently to expand their level of expertise.
 - Give students a thorough understanding of how the IF/IIf function works using the downloadable lesson plan from the UIL website: *Lesson 1-Simplifying the If*.
 - Help students understand how dates and time work in a computer to enable them to understand how calculations are down with dates and time by presenting the downloadable lesson plan from the UIL website: *Lesson 2-Date & Time*.
- Expand students' skills in merging from both Access and Excel to Word. This is a common process, but formatting the merged data is complex.
 - Give students a lesson inserting formatting into merged text fields using the downloadable lesson plan from the UIL website: *Lesson 4-Field Codes for Text-Date-Time*.
 - Give students a lesson inserting formatting into merged numeric fields using the downloadable lesson plan from the UIL website: *Lesson 5-Field Codes for Numeric Fields*.
- Take old tests, and then have the students revise the old tests to add 2 or 3 difficult elements to the tests for their fellow students to then take. This encourages them to try various elements that are present on the available ribbons to find out what they do. This makes students think outside the box and explore their application packages.
- Spend time explaining test-taking procedures that will best serve students.
 - Remind them to use the Preview time wisely to highlight or mark tricky elements of a test or obscure elements that might be overlooked, like centering or bolding. Rough out an approach to an IF/IIf statement in the margin of a test or any other tricky element.
 - Remind them that the Word document on most tests is worth 50-60 points, and this should usually be done first, regardless of where it is in the sequence of the test. They should print it without whatever chart, formula, merge data, etc., to get credit in the event they don't complete the entire test.
 - Explain that the student should print his/her chart in Excel to be graded in the event that the student doesn't have time to embed the element in the document.
 - Tell them that if they get stuck on an element that they can't conquer, that they should continue without completing one element and try to get the rest of the test completed.
 - Teach them that the use of the mouse is devilishly slow and that skilled competitors keep their hands on the keyboard and use shortcut keys for as much as possible: opening a file, saving, centering, bolding, opening a table in Design View, going to the Report Wizard, etc.
 - Tell them to print when the 10-minute warning is given whether they are ready with a completed document or not.
- **What are templates and how do I find them?**
 - Templates are simply sample letters, memos, and reports that students can open on their computer and then type over using the correct format for the document expected on a test. Templates have correct margins and correct spacing between letter/memo parts.
 - Templates can be made by each student following the specific formatting specifications as found in the *Computer Application Handbook*.
 - Have them obtain or make a template for each variation of document in the *Handbook*: Standard Memo, Simplified Memo, Business Report, Left-bound Report, Unbound Report, Block Letter, Modified Block, Simplified Letter, Personal-Business Letter, etc.
 - Include text in the paragraph of the template to define margins if they can be variable; add specifics on indented paragraphs; and show where Mailing Notations, Enclosure Notations, etc. should be placed; and have notes on format for footnotes, paragraph headings, side headings, long quotations, etc.
 - Have students use appropriate paragraph spacing, headings, etc. so that these can easily be typed over during a test.
 - Ensure that students who create their own document templates understand the workings of the template and learn specifics as they are creating the templates.
 - Templates can be created by a coach for use by all his/her competitors.
 - Templates are available as files from third party vendors.
 - Templates include any "help" information that a student wants as a file on his/her computer.

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- **What versions of Microsoft Office are used for the contest?**
 - The Constitution specifies that the Computer Application Contest use a "current or near current version" of Microsoft Office.
 - The current and near current versions would be Office 2007 or Office 2010.
 - Tests are written in Office 2007 and edited in both versions to be sure that all elements operate the same in both versions.
- **Where do I find practice materials, invitational tests for meets, and study guides?**
 - UIL offers the Computer Applications Study Packet that contains a current version of the *Computer Applications Handbook* and a copy of the prior year's UIL tests for Invitational, District, Regional and State Meets. Every student should have a copy of the *Handbook*.
 - Invitational A is available from UIL for contests starting in early January, and Invitational B is available from UIL for contests starting February. See specifics dates for these on the current UIL calendar.
 - Hexco Academic offers the following study materials. (www.hexco.com).
 - Invitational Tests for practice fall and spring practice meets
 - *Practice Packets* with 6 invitational tests given previously at fall and spring practice meets for student practice
 - *Computer Application Concepts* books for Excel, Access, Word, Integration of applications, and Functions.
 - Templates for all types of letters, memos, and reports with appropriate formatting, spacing, and margins for installing on competitors' computers
 - Video instruction for various elements of Excel and Access, including IF statements, Date and Time functions, Pivot Tables, Select Queries, Update Queries, Append Queries, Crosstab Queries, Make Table Queries, and much more
 - One-day workshops periodically available at some Educational Service Centers.
 - Research Associates, (ResearchAssociates@cox-internet.com)
 - Curriculum can be enhanced by some of the Shelly Cashman series. The Advanced Book covers many advanced topics that are used in the Computer Application Contest.
 - Consider asking publishers for sample copies of resources in which you are interested.
- **Is free material available for the students to practice with?**
 - UIL offers some free downloadable Lesson Plans for elements of the Computer Application Contest. These include the following.
 - Lesson 1-Simplifying the IF
 - Lesson 2-Date & Time
 - Lesson 3-Update Queries and the Expression Builder
 - Lesson 4-Field Codes for Text-Date-Time
 - Lesson 5-Field Codes for Numeric Fields
 - Some old UIL invitational tests can be swapped and traded with other coaches who have been "collecting" tests over time.
 - Coaches can make their own tests.
 - Coaches can have students take existing tests and rewrite to add difficult elements for other competitors to take.
 - Look for resources on the web.
 - Talk to other coaches.
- **How do I find out where and when practice meets are being held?**
 - Many practice meets are listed on the UIL website with contact information.
 - Contact coaches in nearby schools to find smaller meets that are not listed with UIL.
 - Consider having your own invitational meet or a mini-meet that includes only limited contests, such as Accounting, Computer Science, and Computer Applications.
 - It is not necessary to compete only against schools in your conference; consider meets that invite all conferences and compete against all others. It is great experience for your students.

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- **What equipment do I need to bring to a contest?**

- Every competitor must have the following:
 - Laptop or notebook computer
 - Printer and paper
 - Writable CD, floppy disk, or flash drive to save documents created during a contest
- Optionally, each competitor can have the following hardware:
 - Mouse
 - Keyboard or keypad
 - USB expansion port for computers that have limited USB ports
 - Pens, pencils, and/or highlighter
 - Extra printer cartridge
 - Copy stand
- Note that occasionally a wireless mouse or keyboard/keypad will interrupt another computer that is nearby, and this can be a serious problem at a meet. You might consider wired devices for this reason.
- Nothing else should be available to a competitor during a contest. (Students may NOT have *Computer Application Handbook*, printed or handwritten help files or notes, networked or shared printers, or networked computers with a shared printer. However, anything that a student has on his/her computer is acceptable at a contest, including templates for documents, help files, and students' own files with information.)
- By all means, let your student have at least a month of working using the laptop/notebook that he/she will use during contests. Changing machines means that you have a different keyboard and mouse, that you may or may not have all the templates and help files you expect, that the version of Microsoft Office may be at a different level or not have all the features installed that are expected.
- Be very careful that if your laptops/notebooks, printer drivers, and other hardware have passwords that you know the passwords prior to trying to use the machine at a competition.
- Give students a checklist of what they should take to a competition, and then let the responsibility for getting all the necessary pieces to a meet be theirs.

- **Can I teach contestants in the classroom?**

- The classroom is the best place to start teaching competitors for Computer Applications.
- For students who are good candidates for this contest, additional teaching will probably be necessary.
- Make self-paced study materials available for your competitors to learn all three applications in a timely manner, if possible.
- Have old tests available for competitors to take, hopefully with solutions against which they can compare their work.

- **How much study time is usually required for the students?**

- Students need to learn to use the three application packages, and that often takes a year plus of classroom learning. Self-paced study materials can be used to accelerate this process.
- Beyond learning the applications, students need to take a large number of tests to encounter a large variety of elements used in tests and gain the ability to field functions with which they are not familiar by following specific directions in tests.
- Dedicated students will thrive on encountering new elements in old tests and begin to investigate features in the applications that have not yet been used on tests.

- **I don't understand the language and terms being used on the tests. Where can I find lessons or examples?**

- Much of the terminology is covered in the *Computer Applications Handbook*.
- Tests using Office 2007 have been used for several years, so tests taken during these last years will have the same type of language that current tests will have.
- Be certain to get last year's tests from UIL for practice. This will familiarize you and your students with the working and terms for tests.
- Take advantage of the downloadable Lesson Plans on the UIL website. These also use the same language and terminology as used on tests.

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- **Where are the contest rules posted?**

- The rules for the Computer Applications Contest are included in the *Constitution* and posted on the UIL web page for this event.
- Additional rules for conducting a contest are included with all tests distributed by UIL for Invitational A & B, District 1 & 2, Region, and State.
- The *Computer Applications Handbook*, part of the Computer Application Study Packet available from UIL, also has a copy of the rules.

- **How do I learn to grade a test and why should I?**

- With every test, there is a scoring sheet that is objective.
- Each line grades an individual element of the test.
- Students should be encouraged to grade their own or each other's tests to understand the value of various elements of a test.
- Coaches should take tests and grade them so that they can understand what is being graded. Attempt is made not to "double dip" in taking points off, and sometimes it is not obvious. For instance often a test gives points for a chart being present and for a chart being between Paragraph 1 and 2. These are grading two different things, although they might appear to be the same thing.
- If a function is graded that could be expressed in more than one way, graders may have to read the test to see what was specified. (i.e. If the decision block of an IF statement asked the student to test to see if A1 was greater than B1, this parameter can be either A1>B1 or it can be B1<A1. However, if a test asked the student to use an IF function with an embedded IF, and the student used an IF function with an AND function that actually accomplished the same thing, the student will get points for correct answers, but he/she will lose points where the embedded IF function is graded.)
- All coaches are required to grade at UIL meets, and if a coach does not grade, his/her student may be disqualified.
- If a coach cannot grade, he/she should find a substitute who will grade. The grading is easiest when coaches grade as most substitutes are not familiar with the contest. It creates a very difficult grading situation when there are multiple substitutes.

- **What is verification and who attends?**

- Verification is a short period in which each student and his/her coach may review the student's graded paper.
- If the coach or student has a question on the grading, the director can be asked to resolve the problem. There should be few questions as all coaches are required to grade.
- Each student and his/her coach should attend Verification to review the score for any discrepancies, addition errors, etc.
- This is not a time to compare papers with other students or coaches.
- If a student and coach do not attend verification, there is no recourse for any error found later on the student's printouts and grading sheet.

- **How can my students earn better scores?**

- Encourage students to spend time during the preview period to isolate and highlight parts of the test that might cause problems. If there is an IF statement, students should try to diagram it so that it is easier to enter into Excel or Access.
- Students should attempt to complete as much of the document in a test as possible and print the document before attempting other portions of a test.
- Students should then work from the first of a test step-by-step through the directions, printing documents as they are completed or nearly completed. When a chart or graph is complete, it should be printed even before it is embedded into a document.
- If a student cannot complete some piece of the test, he/she should skip the problematic element and try to continue to the next steps.
- Speed can be gained on working tests with the following suggestions.
 - Teach students to keep their fingers on the keyboard rather than using the mouse for most operations.
 - Teach students shortcuts to Open, Print, Save, Create a Table in Design View, Start the Report wizard, Create a Query in Design View, Center, Left Justify, Right Justify, Format as Currency, Format as Percent, and on and on.

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- **Are all the official UIL tests (Inv. A & B, District 1 & 2, Region, State) the same level of difficulty?**
 - Invitational A is usually a very basic test with elementary elements, and it usually is Excel and Word with a printout from each and embedding something from Excel into the Word document. Or it can be a simple Access and Word combination with a printout from each and data taken from Access to Word or a merge from Access fields to Word document.
 - Invitational B is much like Invitational A, but with several more difficult functions or elements, but all are usually presented in simple, step-by-step format.
 - District 1 and 2 are still more difficult and usually include all three applications to complete two printouts. More complex formulas or features are used, but these are usually presented in simple, step-by-step format.
 - Region is at a high difficulty level and leaves more of the project to students' problem-solving abilities. All three application packages are often used.
 - State is at a high difficulty level and also leaves more of the project to students' problem-solving abilities. All three application packages are often used.
- **If I have questions about a test or grading, who do I contact?**
 - Questions may come up during a UIL meet, and Linda Tarrant is reachable from 800.391.2891 for any mediation or explanation. If she is not at her office number, it will give her cell number for you to call.
 - If you have a problem when you are taking an old test as practice, email Contest Director Linda Tarrant (hexco@hexco.com) with the following.
 - Include your attempt in an appropriate file (not a pdf picture of the file).
 - Write out specific instructions that you are trying to accomplish. Do not just give the test identification and line number for the Contest Director to pull out a test and look up the element on which you are working.
 - Usually, you'll get a response within a day or two, but if you don't include both the attempt with which she can work and the spelled out instruction, you will simply have the email returned to ask for the attempt and the instructions.
- **What happens at an invitational meet?**
 - Arrive 30 to 45 minutes before a contest to set up your equipment.
 - Open all application programs.
 - Test each program to be sure that it opens, operates, and prints.
 - Check the time and date on your computer.
 - Turn off wireless adapters; use a plain screensaver; set hibernate off; turn off audible timers or clocks.
 - Contest will start with a roll call, and coaches will leave the contest room unless they are assisting.
 - Start with all applications open on your computer.
 - Have your "Open" pointing to the location of your template files.
 - Tiebreakers will be passed out.
 - When the contest is started, open the appropriate document template for the tiebreaker.
 - Work for five minutes until time is called.
 - Print your document when instructed to do so by the contest director.
 - Write your contestant number on the upper right corner of the tiebreaker.
 - Save your tiebreaker document to your flash drive/CD/floppy.
 - Follow directions of the contest director for either storing your tiebreaker document or turning it in.
 - Tests will be passed out so that instructions cannot be viewed.
 - Preview time will be started by the contest director.
 - Review the test.
 - Highlight or mark any difficult elements.
 - Draw diagrams for any IF functions.
 - Mark "small" items as bold, italic, center, etc.
 - Test will be started by the Contest Director, and students immediately start working.
 - Consider starting with the Word portion of the test (if there is one) and print your document, though it may have a chart or merge field missing.
 - Go back to the front of the test and start sequentially.
 - Work smart, and if you get stuck on a function or element of the test that you cannot do, skip it, and plan to come back after you've completed other parts of the test.

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- A ten-minute warning will be given. If you have not printed anything by then, print something.
- A two-minute warning will be given.
- Save frequently during the contest to your flash drive/CD/floppy.
- Stop will be called out by the Contest Director, and you should raise your hands so that it is evident that you are no longer working.
- No printout may be initiated after the Contest Director stops the test unless there have been circumstances during the contest where you had a machine malfunction and received help from an assistant. In that case the assistant will return while you print your document either on your own machine or from your flash drive on another system.
- Follow the Contest Director's instructions for turning tests in.
- Do not share your Contestant Number with your coach prior to his/her grading.
- Grading will commence as quickly as possible either in the same room after the students have cleared out their systems or in a different location.
 - If possible, have 1A schools grade 4A papers, and 4A schools grade 2A papers, etc.
 - If that is not possible, try to ensure that a coach does not grade his/her own student's paper.
 - All Printout 1 papers should be graded at the same time so that there is common discussion for any problems encountered. This way, all coaches will be familiar with decisions and can pass the decisions along to students at Verification.
 - All Printout 2 papers should be graded at the same time as well.
- Verification should occur at a preplanned time and place.
- Awards should occur at a preplanned time and place.
- **When do you open and look at a student's flash drive?**
 - During grading or verification, look at a student's flash drive to verify that he used the correct application if there is some doubt that he/she did (i.e. Access for database, Excel for spreadsheet, and Word for word processing).
 - If there is a question about whether a student actually typed in merge codes or merged from a database, open his document to verify that the operation was actually merged.
 - If you can't quite tell whether specific formatting was done, the application may be opened to verify.
 - If, however, a student failed to turn in his/her flash drive/CD/floppy and there is a point of contention, the student automatically loses the points in question.
 - Most tests are written such that students get credit for correct answers, and they also get credit for correct elements in a formula which is graded separately.
 - When in doubt, look at the source, but remember that grading is visual. If his/her margins look to be slightly off, bend in the direction of giving the points because we've given a fully plus or minus 1/4" latitude in margins, and when you factor in paper shift and printer anomalies, be generous.
- **Are we ever going to use large files that are downloadable before a contest where students then don't enter data, but work with data provided?**
 - Currently, we're considering using downloadable files for the State Meet in the future. These will be available prior to the meet for download to your laptops/notebooks.
 - If you have not downloaded, it will be possible to get them copied from a flash drive the night before the contest.
 - This means that the contest will be based on using a large volume of data so that results will not be so easily predicted. Directions to do select queries or make table queries will have to be followed carefully. Grouping on reports will be critical and will have to follow instructions. This will alleviate many of the typo problems which cause incorrect answers across the board.
 - Large databases will allow more subtotals, larger and more meaningful pivot tables, more reports with summary only stipulated in Access reports, and a better understanding of these applications when working with live data as in the "real" world.