



# Computer Science

**These directions expand upon but do not replace the information in the UIL Constitution and Contest Rules. The contest director should read Section 928 of the Constitution, then read these guidelines for additional details.**

## Before the meet

### ROOM

Secure a room of adequate size for the number of contestants expected. The room should have chairs and desks or tables of proper height.

For the programming component, secure a room with adequate power supply and table space for one computer station per team. Secure a similar room nearby for judging.

### MATERIALS AND EQUIPMENT

The contest director will provide the following.

- A copy of the rules from the *Constitution and Contest Rules*
- Five blank sheets of paper for each contestant
- Accurate clock for timing
- Pencils for grading (Contestants provide their own number two pencils.)
- Calculators are not permitted in Computer Science.
- (DISTRICT) One 8 1/2 x 11 envelope per school (8-12)

### CONTEST PACKET

The League office will provide the following.

- Instructions
- Answer sheets
- Copies of the tests and answer keys in a sealed envelope. (Do not open the sealed district test packet until just prior to the beginning of the contest.)
- Contest Evaluation Form
- Programming problem sets for teams
- Judging CD containing judging software, scoring software and data files
- Extra copies of the programming component problem set
- Team packet materials for the programming component
- (REGION) Regional awards order form (green)
- (REGION) State Meet information cards for state meet qualifiers (11)

**INVENTORY ALL materials except the sealed district contest packet well in advance to make sure nothing is missing. If necessary, photocopy any needed UIL forms.**

**PERSONNEL**

- Contest director. A coach of a contestant may serve as contest director.
- Assistant to the contest director. (REGION) The UIL staff may recommend an assistant to the contest director from one of the high school campuses in the region. This person will serve as a support person for the contest director and may be on hand before, during and after the meet to answer questions which may arise concerning the contest. Coaches of competitors may serve as assistants to the director.
- Graders. If needed, coaches are expected to serve as graders. From a list of volunteers, the contest director should select by lot either three or five coaches to assist in grading.
- Programming component staff. Secure a head judge, assistant judges, archivist, score keeper, technicians and runners for the programming contest. The contest director may assume the duty of the head judge. The contest director may assign the remaining positions and these remaining people may also be coaches.

**TIME**

- Allot one hour for the written exam contest, approximately 15-20 minutes for opening remarks, roll call and instructions, and 45 minutes for the written portion of the contest. It is critical to stay on schedule as some students may need to go to other events. All contestants will take the written exam.
- Schedule and announce, during opening remarks and/or in the program, a 15-minute verification period to be held prior to the announcement of official results.
- Allot three hours for the programming component — one hour for setup and preliminary procedures and two hours for the contest. Only teams may participate in the hands-on programming component.

**CONTEST ROSTER & RESULTS SHEET**

(DISTRICT & REGION) Your meet director will provide to you a contest roster, generated from the UIL Spring Meet Entry System. It will list the contestants and alternates from each school. You will need to assign contestant numbers, and may use the numbers beside each contestant's name on the roster. You should record scores and/or results on the contest roster to give to the meet director, who will then enter the results/scores into the Spring Meet Online Entry System.

**SUBSTITUTIONS**

(DISTRICT) Schools may replace contestants on the official district meet roster with substitutes so long as the substitutes present the contest directors with the appropriate documentation.

- *Students whose names were never entered into the online entry system* may substitute so long as they provide the contest director before the contest begins with a substitute eligibility form (found in the appendix and on the UIL web site) or a letter signed by a designated school administrator certifying the student's eligibility.
- *Students whose names were entered into the online entry system and hence certified as eligible* may substitute for a contestant so long as they provide the contest director with written notification (either the substitute form or a letter) signed by the event coach or representative from the contestant's school. Eligibility is already certified. Therefore, written notification is for the convenience of the contest director who may not have a copy of the other contest rosters.

At the conclusion of the meet, submit the substitution forms/letters to the spring meet district director to be filed with the school's original entry (see C&CR, Section 902 (g) (B)).

(REGION) If a member of a school's team cannot compete, only one substitution may be made. If a team needs more than one substitution, the alternate team will compete. The substitute must submit to the contest director a letter or form (such as the sample form found in the appendix) signed by a designated administrator to certify eligibility. Submit substitution forms to the Regional Director prior to the contest or to the contest director during roll call. Do not make a substitution for an individual contestant who is not a member of a team.

**TEAM COMPETITION**

(DISTRICT) Schools have the option of entering either three or four competitors at the district level. While all four competitors may compete for individual honors, only the top three scores for each school will count in team competition. A team must have three contestants compete to qualify for the team competition. For four-member teams, all four contestants take the written exam and compete for individual awards. Only three team members may participate in the hands-on programming component. The team's coach is responsible for deciding which three members will participate in hands-on programming, and for notifying the contest

**FOR MORE information on substitution, see C&CR, Section 902 (g) (B).**

director. Team members who qualify to regional will compete for both team and individual honors at that level. All three or four members of the winning team will advance to the next higher meet, and the top second place overall team (wildcard) in the region will advance to regional competition.

(REGION) A team must have three contestants to qualify for the team competition. A person who advances to this level of competition does qualify for individual ranking and medals. Do not exclude them. For four-member teams, all four contestants take the written exam and compete for individual awards. Only three team members may participate in the hands-on programming component. The team's coach is responsible for deciding which three members will participate in hands-on programming, and for notifying the contest director.

#### ALTERNATES (REGION)

Alternates may compete only in the absence of an individual who won first, second or third place in the same district competition. Contest directors should delay calling for alternates until immediately prior to the beginning of the contest.

#### SORTING ENVELOPES

(DISTRICT) Provide and label a large (8 1/2 x 11) envelope for each school entered in the district meet. Write the name of the school and contest on the top of the envelopes. Save the sorting envelopes to use after the verification period.

## During the contest

1. Announce the time for the verification period and the announcement of unofficial results.
2. Read aloud the following statement: "Sponsors, contest directors and contestants are responsible for maintaining confidentiality of contest material. Transfer of information relative to the test shall be considered a violation of the academic spring meet code and subject to penalties as outlined in Section 700 of the C&CR."
3. Announce that contestants shall remain in their seats until the end of the 45 minute testing period. The contest director may make an exception for an emergency. Except in cases of emergency, the UIL does not recommend allowing contestants to enter the room after the contest has begun.
4. Seat the contestants sparsely around the room. Exclude from the contest room all persons except contestants, the contest director and an assistant.
5. Provide each contestant with five sheets of scratch paper. Students may not bring their own scratch paper but are permitted to write on the exam.
6. Check roll from the contestants listed on the contest roster. The contest director shall number the test papers and answer sheets in the upper right hand corner or in the space provided for contestant's number. These numbers shall correspond with the number of the contestant on the contest roster. Check all contests to ensure that all pages are printed clearly and completely. Hand out the test papers by calling the contestant's name and giving the test with the corresponding number.
7. For the written exam, read aloud the following last-minute instructions to the contestants:
  - a. Keep your test papers closed until instructed to begin.
  - b. Indicate your answers using capital letters in the appropriate blanks provided on the answer sheet.
  - c. If you are in the process of actually writing an answer when the signal to stop is given, you may finish writing only that answer.
  - d. You may not use calculators.
8. For the programming component, read aloud the following instructions to the contestants:
  - a. Keep your problem set closed until instructed to begin.
  - b. Copy your solutions to your disk and enclose the disk in the run envelope.
  - c. Teams may use their computer's built-in help files and up to two reference books.
  - d. Students who complete the programming problems or choose not to finish must remain quietly in their seats until the two hours is complete, unless prior arrangements have been made with the contest director.
9. Give the signal to start. After the stop signal is given, gather all papers.

#### WILD CARD

**Each region's highest scoring second place team may advance to the regional academic meet. In the event of a tie, after tie-breaking procedures have been implemented, all teams involved in the tie will advance. Wild card teams are posted on the UIL web site.**

**IN ORDER to be eligible as a wild card representative, district results must be received by the regional director no later than 5 p.m. on the Monday following the final district academic week. Failure to meet the deadline disqualifies the district from advancing teams as wild card representatives. The highest-scoring second place team from the regional meets may advance to the Academic State Meet.**

**ENTER  
ALL  
SCORES  
INTO ONLINE  
SYSTEM!**

**Enter the scores of all contestants into the UIL Spring Meet Entry System — not just the top six. All scores are needed to determine team champions. The UIL strongly urges meet officials to enter unofficial results into the online system prior to verification.**

## Grading the meet

### GRADERS

Coaches may serve as graders.

### GRADING

Accuracy shall not be sacrificed for speed. The League office will provide a key for graders. Both the key and the instructions will be included in the contest envelope. The grading of all papers and the determination of the net scores shall be double-checked to reduce the possibility of errors.

**Answer Key Errors.** In the case of an error on the answer key of an objectively-scored contest, graders should notify the UIL State Office of the nature of the error and/or contact the respective state contest director to seek clarification. Papers should be judged on correctness rather than on an incorrect answer given in the key.

### SCORING

Grade all questions uniformly: six points for each correct answer; no points given or subtracted if unanswered; two point deducted for an incorrect answer. The team score consists of the total of the top three team member scores.

For the programming component, correct solutions will receive a predetermined number of points; do not give or subtract points if no solution is attempted. Incorrect solutions receive a five-point deduction; these deductions are only applied to the team score if the team ultimately gets the problem correct. Add programming points to the written exam team score to determine the final team score.

### DETERMINING PLACES

- Individual Competition. From all the written exams, first place goes to the contestant making the highest net score, second place to the contestant making the next highest, third place to the next highest and so on.

(REGION) The top three individuals will advance to state.

- Team Competition. Team scores and ranks are calculated when results are entered into the Spring Meet Online Entry System. For schools that enter four contestants, only the top three written exam scores from among those contestants count toward the team score. The final team score is the combined score from the hands-on component and the written exam. Declare the team with the highest total the winner of the team competition, and all members of the team will advance to the next level of competition. Declare the team with the second highest total score the alternate team.

### TIES

Break ties for individual places by considering the number of questions attempted and the number answered correctly to determine the highest percentage correct. The formula is: percent accuracy equals the number of problems correct divided by the number of problems attempted. If a tie still exists, do not break it. In the event of a tie for first place, there is no second place. In the event of a tie for second place, there is no third place, etc. In case of a team tie, consider the programming component first. If a tie still exists, consider the scores on the written exam. If a tie still exists, consider all entries from a school. Add the fourth team member's written exam score for four-member teams. Don't add anything for three-member teams. If a tie still exists after all tiebreakers are applied, it will not be broken.

## After the contest

### VERIFICATION PERIOD

Unofficial results including names and scores of those who appear to have placed first through sixth and the top four teams should be announced. Allow the contestant and coach a time period not to exceed 15 minutes to look at the contestant's test. If errors in scoring are found, the contest director should make the correction. Questions should be resolved at this time. Interested parties may contact the state director at their own expense to inquire about a test item. Ask contestants to place their papers in the envelope labeled for their school. Pick up all tests and answer sheets so that none remain with the contestant or coach. Contestants and coaches not present at the verification period forfeit their opportunity to ask questions.

**ANNOUNCING OFFICIAL WINNERS**

- Individual Competition. After resolving all questions, the contest director should announce as official results the name, the school and the score of each contestant who places first through sixth. These results, once announced as official, shall be final.
- Team Competition. After the interested parties have been gathered, team scores examined and individual winners have been announced, the name of the team’s school, team members, and team score shall be announced for the team winner and alternate team. The results, once announced as official, shall be final.

**QUALIFICATIONS TO REGIONAL**

(DISTRICT) Contestants can qualify to regional as individual first, second or third place winners or as members of the winning team or the wildcard team. All who qualify to regional will compete for individual honors.

**POSTING RESULTS DURING THE MEET**

Announce or post the names, schools and scores of only the persons placing first through sixth, and the names, school and scores of the winning and alternate team.

**RETURNING PAPERS**

(DISTRICT) If results are final and all questions resolved, entries may be returned no sooner than the end of the contest on the Saturday of the respective district week.

(REGION) If all questions are resolved and if the meet is held on Saturday, the test, answer keys, scoring charts and answer sheets should be returned to the contestants the day of the meet.

**REPORT TO DIRECTOR**

(DISTRICT) Individual contest directors shall give the contest roster/results form and sorting envelopes to the district meet director immediately after the contest. The district meet director is responsible for entering results into the UIL Spring Meet Online Entry System. District results must be submitted into the UIL online system and made available for public review by 5 p.m. on the Monday following the second district week.

(REGION) Individual contest directors shall give the contest roster/results form and sorting envelopes to the regional director immediately after the contest. The regional meet director is responsible for entering results into the UIL Spring Meet Online Entry System and making them available for public review by 5 p.m. on the Monday following the regional meet. Regional directors shall also provide a list of contestant absentees if alternates were not present to take these individuals’ places.

**MAILING RESULTS**

Mailing full meet results to participating schools is optional since results will be posted online.

**EXTRA CONTEST MATERIALS**

(DISTRICT) Destroy all extra materials on the Monday following the second district week.

(REGION) Destroy all extra materials on the Monday following the regional meet.

**NOTICE:**  
**The Computer Science contest format will be a written exam and hands-on problem solving component at ALL levels, including district.**

**INDIVIDUAL POINTS**

1st place.....	15
2nd place.....	12
3rd place.....	10
4th place.....	8
5th place.....	6
6th place.....	4

**TEAM POINTS**

1st Place.....	20
2nd Place.....	16
3rd Place.....	12

Individual school maximum points = 42

**COMPUTER SCIENCE team members also qualify to compete for individual awards at all levels.**