



Cyber Foundations High School Fall 2011 National Competition

October 3-November 18, 2011

This is the second year of the competition, and offers the opportunity for you to engage your students in one of the most dynamic and in-demand career areas today. The competition emphasizes a mastery of knowledge in topics central to information security, which is essential to maintaining the nation's competitive edge and safeguarding national security.

About the Competition

The Cyber Foundations Competition is the entry-level competition in a series of increasingly challenging contests sponsored by U.S. Cyber Challenge (USCC). USCC was chartered to identify and nurture talented young Americans who can become the future cyber policy leaders, cyber guardians and cyber warriors for United States companies, government agencies, and military services.

Opportunities for students who do well in these competitions range from awards and recognition by political leaders, to internships and scholarships. For example, the U.S. Navy has authorized full-four year scholarships for high school students who excel in the U.S. Cyber Challenge competitions.

The Cyber Foundations tutorial material takes only 3 or 4 hours to review, although students that spend more time and do the exercises seem to get higher scores. If interested, please register for participation by selecting the link at the bottom of this message.

Cyber Foundations has two parts: (1) on-line tutorial and video education materials that allow students to expand their knowledge, and (2) quizzes that allow students to demonstrate mastery. Three topics are presented and tested: networking, operating systems, and system administration. Each topic has a separate set of educational materials and a separate test. Teachers may use the materials in class but that is not required.



The three topical areas in the competition are representative of the foundation skills needed by any person hoping to become a skilled cyber professional. In addition, these three skill areas are in high demand throughout industry and government. The U.S. Bureau of Labor statistics ranked jobs requiring these skills as the 2nd fastest growing in the United States between now and 2018, with 155,000 new jobs opening up (http://www.bls.gov/emp/ep_table_103.htm). The potential rewards to students who pursue this career path cannot be overemphasized. The Department of Homeland Security is establishing cyber security centers across the country with college partners where curriculum is being developed and research conducted in the area. In addition, the Obama Administration has made national defense from cyber attack one of its highest priorities and is committing substantial resources towards this goal.

What is Required:

Target Student:

- Students with an avid interest in the technical aspect of computers who may work on their own time.

Technical Requirements:

- Students will need access to a computer with Internet access, including the ability to watch YouTube videos and read materials on numerous third-party websites.

Time Requirements:

- For each of the three modules, each competitor gets access to the training materials for approximately two weeks prior to each quiz. Over this time span, we expect most students will spend 3 to 8 hours reviewing the tutorial. Then, on competition day, the quiz takes about 40 to 90 minutes.

Possible Ways to Deliver the Material:

- Show the Cyber Foundations materials in class.
 - Most teachers tell us that three or four days of one hour classes is sufficient per module for review of the training materials, and each of the three quizzes takes about 40-90 minutes.
- Have the students review those materials as homework, discuss the materials and go over the quizzes in class.
- After school programs.
- Have students complete on their own.

Additional Information

US Cyber Challenge Website: <http://www.USCyberChallenge.org/>

Cyber Foundations Registration:

<http://workforce.cisecurity.org/competitions-camps/cyber-foundations/cffall-2011.cfm>

Navy Scholarships for U.S. Cyber Challenge winners:



http://www.navy.mil/search/display.asp?story_id=51745

How to Participate

Jessica Smith, NYS Division of Homeland Security and Emergency Services, Office of Cyber Security, Outreach Assistant, will be the NY State Coordinator for the 2011 competition. As the State Coordinator, Ms. Smith will provide direct support and guidance to teachers in New York State who choose to participate in the Cyber Foundations Competition.

If you are interested in participating in this year's competition, please contact Jessica Smith at cyber.outreach@dhses.ny.gov as soon as possible but before the September 30th registration deadline. The cost to register an entire school is \$100 which allows an unlimited number of students to participate. The Office of Cyber Security has sponsorships available on a first come, first serve basis. Please let us know if you are interested as soon as possible and we will provide you with the information necessary to register.

Important Dates for the Fall 2011 Cyber Foundations Competition

- September 30: Registration deadline
- October 3 to October 21: Online tutorial for Module 1 (Networking) open
- October 21: Competition for Module 1
- October 24 to November 4: Online tutorial for Module 2 (Operating Systems) open
- November 4: Competition for Module 2
- November 7 to November 18: Online tutorial for Module 3 (System Administration) open
- November 18: Competition for Module 3

If you have questions or would like more information, contact Jessica Smith at cyber.outreach@dhses.ny.gov.

Good Luck!