NATIONAL CYBERWATCH CENTER

Competency-Based Mastery Learning Modules - Implementers Wanted

National CyberWatch Center

Prince George's Community College

Room 129B

301 Largo Road

Largo, MD 20774
www.nationalcyberwatch.org

National CyberWatch Center - Curriculum Standards Panels (NCC-CSP)

::/ Founded in 2016

::/ **Mission**: align instructional design, skill practice facilities, cybersecurity professional job performance standards & national workforce frameworks

NCC-CSP (con't)

::/ NCC-CSP was extended to create course-specific standards panels to advance the models of instructional design used in cybersecurity education

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NSA Cybersecurity Curriculum Development Grant

::/ *Developing pathways to mastery* to increase the cybersecurity *capability maturity* of the entrant and incumbent IT workforce

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NSA Cybersecurity Curriculum Development Grant (cont)

::/ Develop a *course-specific standards panel* (AKA **Curriculum Standards Course Panel (CSCP)**)

::/ Will develop a competency-based, mastery learning curriculum library for **Information Security Fundamentals**

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CSCP Process Timeline

Summer 2017:

1. Formed the panel of a broad cross-section of academic, industry & gov't SMEs (**DONE**)

CSCP Process Timeline (con't)

Fall 2017:

2. Elicit measures of effective performance to establish the criterion for mastery (**IN PROCESS**)

CSCP Process Timeline (cont)

Fall 2017 (con't):

3. Instruction module/lab selection & development (**Start in Nov.**)

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CSCP Process Timeline (cont)

Spring 2018:

4. Pilot implementation of the learning library

5. Evaluation and improvement

Call to Action

Call to Action (con't)

- Looking for instructors to implement the instructional objects and assessments, in part or whole, in an ***Information Security Fundamentals-type course*** to raise capability maturity of graduates

- Spring 2018 semester

Call to Action (con't)

- Modules include:
  - Pre-Assessment (AKA *Readiness Assessment*)
  - Instructional materials (e.g., videos, lecture slides)

Call to Action (con't)

- Modules include (con't):
  - Knowledge Assessment (AKA *Concept Inventory*)
  - Design specifications and/or mapping to existing open-source Tutorial-Based labs

Call to Action (con't)

- Modules include (con't):
  - Action Inventory (Procedural Knowledge tested as a skill)
  - Design specs and/or mapping to existing open source Challenge-Based labs
  - Judgement Inventory

Q&A

Contact Information

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