

# **Broadening Participation in Cybersecurity**

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# Broadening Participation

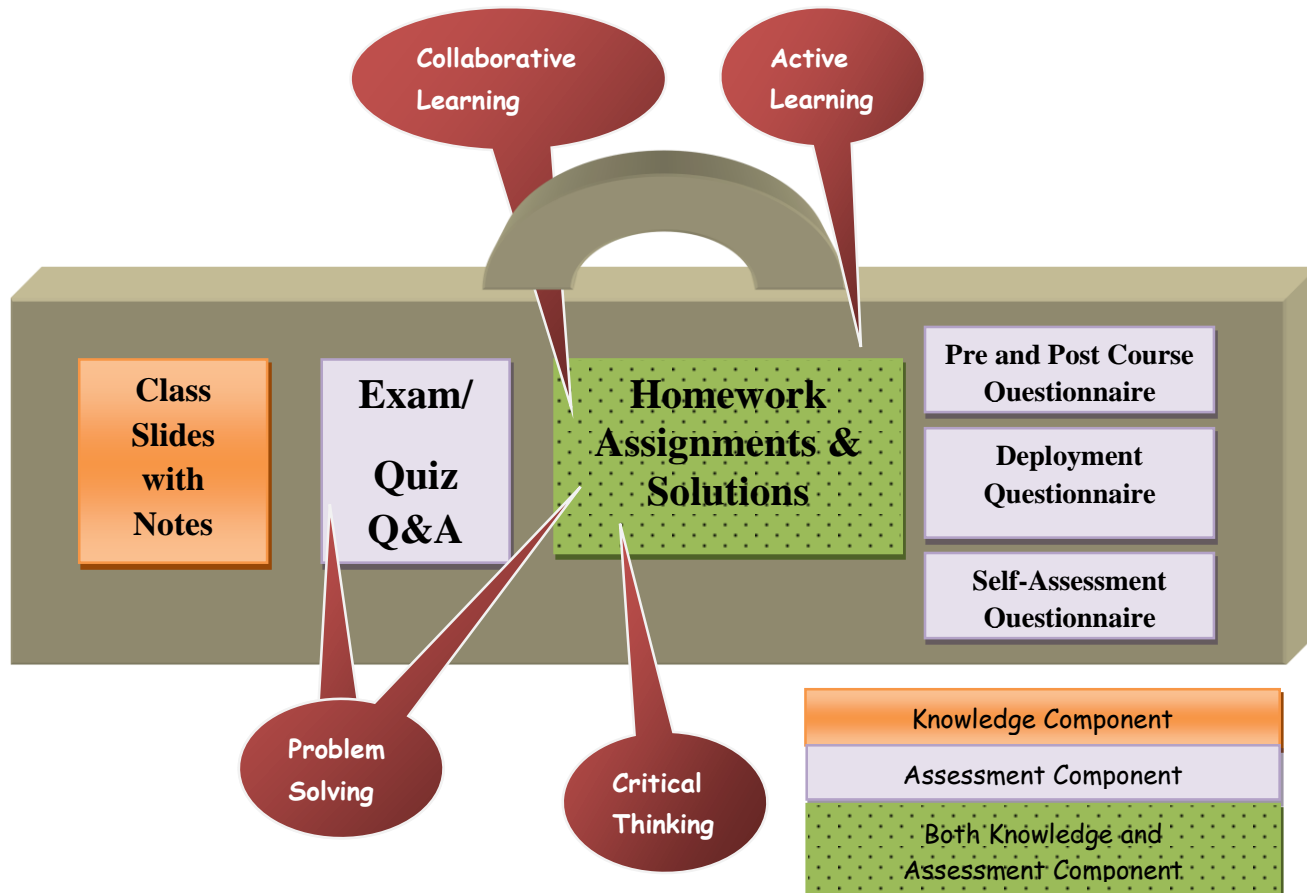
- **Teaching Cybersecurity as part of the mainstream Computer Science (CS) education**
- **Increasing women's representation in Cybersecurity**

# Security Conscious CS Workforce

- **Security consciousness is an essential skill set for IT workforce today**
  - Majority of financial losses are caused by security incidents attributed to non-malicious actions by “insiders”
- **Most institutions do not offer mandatory security course in their CS curriculum**
  - ACM/IEEE-CS Computer Science Curriculum 2013 identified Information Assurance and Security (IAS) as new knowledge area (KA)
  - [www.cs2013.org](http://www.cs2013.org)
- **SecKnitKit and CReST are efforts to address this issue and more**

# Security Knitting Kit ToolBox

## (Security Content for Non-Security CS Courses)



# SecKnitKit and CReST Progress

- **20+ security modules for 4 different CS courses**
- **Institutionalized at TTU**
- **Larger scale deployment through CReST**
  - 5 Workshops for 60+ CS faculty across nation
  - 3 CReST workshops underway within an year
  - More to follow

# Why Diversity

- **Diverse workforce performs better**
- **While women are 50% of US workforce**
  - **25% of IT workforce is women**
  - **8 to 11% of cybersecurity workforce is women**
- **WiCyS (Women in Cybersecurity) is an effort to help in recruitment, retention and advancement of women in cybersecurity**

# WiCyS Features

- **Connecting mentor and mentees**
  - 50% students, 25% educators, 25% professionals
- **WiCyS scholarships include registration, lodging and meals**
- **Parallel tracks in education, research and industry**
- **Workshops, technical sessions, poster competitions, career/grad school fair**

# WiCyS 2014 Conference

- Held in Nashville, TN, April 11-12, 2014





# WiCyS 2015 Conference

- **Held in Atlanta, GA, March 27-28, 2015**



# WiCyS 2016

- **To be held in Dallas, TX**
- **March 31-April 2, 2016**
  - **Scholarship application open**
  - **Call for participation open**

# More Information @

- **Security Knitting Kit Project**
  - [www.secknitkit.org](http://www.secknitkit.org)
- **CReST Project**
  - [www.crest4cs.org](http://www.crest4cs.org)
- **WiCyS Project**
  - [www.wicys.net](http://www.wicys.net)

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