
7/15/09
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Goal/Assessment

Goal
Where are we going?  What is expected?  What will the student be able to do, know, and value at the end?

The student will be able to describe the standards, laws, regulations, policies, and guidelines that affect RFID.

Assessment
How do we measure?  How will the student be assessed in the lessons and at the end of the module?
Use general terms.  Present this to the student at the beginning of the module.

A student should:

- Be able to recall the most common UHF passive RFID standard, identify the item management standards, and recall EPCglobal history.
- Be able to recall the frequency used by proximity and vicinity smart cards, describe the difference between proximity and vicinity smart cards, and describe the importance of FIPS 201.
- Be able to recall the two common frequencies for animal identification tags, describe the reason the frequencies for animal identification were chosen, and describe why animal tags have the given range.
- Be able to recall the part of the FCC rules that governs passive RFID tags, describe why frequency hopping is required in ISM bands, and describe the dwell-time constraints when frequency hopping in UHF passive RFID.
- Be able to describe HSPD-12, NIST FIPS 201, the Real ID Act of 2005, the security features of the U.S. E-passport, and why U.S. States are reluctant to accept guidelines established by the Real ID Act of 2005.
- Be able to recall the multi-industry association that promotes smart card technology, recall the standards organization that published guidelines for securing RFID systems, and recall some topics of NIST Special Publication 800-98.

Hook

Pique the student’s interest using a case study, interesting story, experiment, or disaster.

Case study:  How many of you have a passport?
Lessons
Divide the module into logical lessons (4-5 days). Create lessons, activities, experiments, homework and/or quizzes based on these grain size lessons. Lesson: RFID Frequency Bands

Lesson: EPCglobal and ISO/IEC Item Management Standards

Lesson: Contactless Smart Card Standards

Lesson: Animal Identification Standards

Lesson: FCC Rules for ISM Band

Lesson: Identity Standards

Lesson: Guidelines for Securing RFID Systems

Culminating Activity
Tie it all together returning to the big idea. Go full circle. Create a culminating experience that ties lessons back to the module theme. Create module-level rubric and each topic is one of the lessons below.

Discuss the future of identity management systems.

Assessment
Assess the results using tools such as paper/pencil, programming, simulation, demonstration, experiments, and projects. Paper and pencil homework assesses what you know. Programming, simulations, demonstrations, and projects assess what you can do.

Assessment:
Use rubric based on lessons. Each lesson is a row in the rubric.
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Acknowledgment
These materials were developed through a grant from the National Science Foundation at the University of Arkansas. Any opinions, findings, and recommendations or conclusions expressed in these materials are those of the author(s) and do not necessarily reflect those of the National Science Foundation or the University of Arkansas.

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