



THE SOFTWARE DEVELOPMENT LIFECYCLE

AIRA Discovery Session September 25, 2017, 4pm Eastern

Immunization Information Systems for a New Era

OVERVIEW

Presentation

The Software Development Lifecycle

Questions, Comments and Discussion



TODAY'S SPEAKERS:

Therese Hoyle, IIS Consultant with Michigan Department of Health and the Public Health Informatics Institute (PHII)

Teresa Dussault, Training Operations Manager for the Informatics Academy at PHII

Erin Roche, Independent Public Health Consultant with PHII

Jenne McKibben, IIS Director with the State of Oregon's ALERT IIS



PLEASE SAVE QUESTIONS/COMMENTS UNTIL THE END...

Designing and Managing Public Health Information Systems: 8 Steps to Success



Designing and Managing Public Health Information Systems: 8 Steps to Success

COURSE OVERVIEW





Background

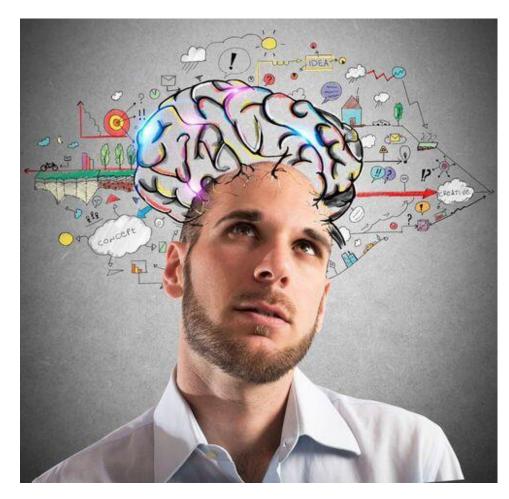
- What is it?
 - 8 week instructor-led course
 - Focused on the role of program staff
 - In developing & managing PH information systems
- Offered since 2013
- Will be its 9th offering in Winter of 2018
- Over 350 people trained to date
- Individual and team registrations





Course Objectives

- Learn to apply the "8 steps" of the IT lifecycle to your project and work
- Ultimate goal: Improved information for public health practice





Course Components

- Charter
- Project example
- Online learning modules
- Weekly webinars
- Selected readings and other assignments
- Discussion forum





Charter & Project

- Individuals and teams sign a charter
 - Requires approval of project sponsor
 - Includes specifics about dedicated time for course
- Project example
 - Can be current, past, or future
 - Used to give relevant example for application of concepts





Online learning modules

- Completely revised and updated in 2017
- 10 modules total: Introduction + 8 Phases + Application
- Uses realistic PH scenarios to deliver core course content



Weekly webinars

- Eight one-hour live webinars (1/week x 8 weeks)
- Review key concepts
- Address questions and highlight examples and experience of course participants
- Instructors share advice and examples from their professional experience
- Encourage attendance as a team





Discussion Forum

- Response to questions included as a weekly assignment
- Can be answered as individual or as team





Success factors for course

- Engagement with the content
- Participation in a learning community
- Support of sponsor in organization
- Dedicated time for course work
- Dedicated time for discussion and application





Course fees

- \$950 per individual
- Discounts for team registrations (up to 50%)
- Fees include
 - Participation in 8 week course
 - Access to content after the course with no expiration
 - Enrollment in alumni discussion community after course ends
- Next offering is Jan/Feb 2018





Designing and Managing Public Health Information Systems:

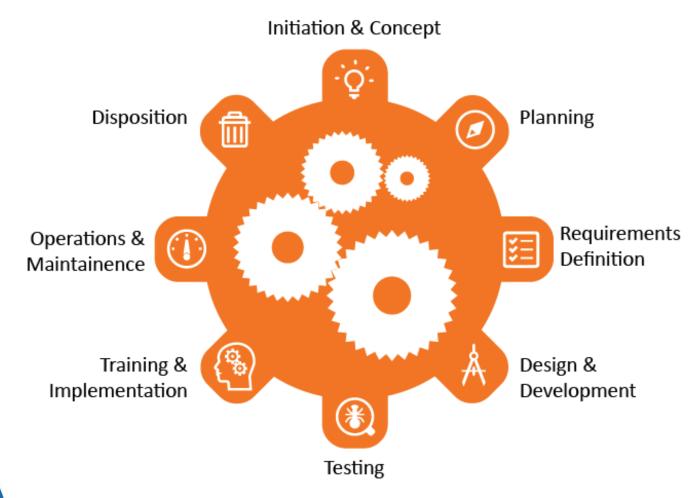
8 Steps to Success

IT LIFECYCLE OVERVIEW





IT Lifecycle





IT Lifecycle: Guiding Principles

- Follow the 8 steps in order
- Do not omit a step this typically results in expensive mistakes and even project failure
- Each step has specific questions that you will need to answer





IT Lifecycle: Questions for Each Step

- 1. What is the purpose of each step?
- 2. What are the key activities?
- 3. Who needs to be involved and their role?
- 4. What are the checkpoints along the way?
- 5. What are the outputs of the step?
- 6. What are the exit criteria to move on to the next step in the cycle?



The IT Lifecycle: Content

Each step will have:

Decisions

Approaches to overcoming barriers and addressing challenges

Key risks if challenges are not well addressed before moving to the next step





Value of Learning the IT Lifecycle

- Establishes realistic timeframe for projects
- Establishes the need to formally determine system requirements
- Provides the opportunity to assess technology in a systematic way





Value of Learning the IT Lifecycle

- Identifies key activities
- Serves as a roadmap
- Improves communication among project members
- Helps to avoid costly mistakes





Course Participant Projects

- Immunization Information System
- Communicable Disease Surveillance Systems
- Electronic Birth and Death Record Systems
- Electronic Lab Reporting Systems
- Syndromic Surveillance System
- Anesthesia Record Keeping Program
- Family Home Visiting Module
- Residential Recycling Data Management System





Designing and Managing Public Health Information Systems:

8 Steps to Success

DISCUSSION FORUM





About the Forum

- Discussion board
 - Weekly questions
 - Slide sets and webinar recordings
 - Additional resources
- Complements the online learning modules and helps inform and enrich webinar discussions
- Facilitates participation in a learning community





Promoting a learning community

- Introductions at the beginning of the course
 - Where people work
 - Information systems they work on and/or use
 - Contributions to and requests of the learning community
- Alumni discussion community





How students use the Forum

- Respond to 2-3 questions each week about a particular phase/aspect of the IT Lifecycle
- Sharing of experiences successes and challenges
- Respond as an individual or as a team





How the facilitators use the Forum

- Review responses each week
- Identify opportunities to review content, answer questions, and provide additional resources
- Highlight students' experiences to enrich the webinar discussion
 - Share successes and best practices
 - Strategies to address challenges





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PARTICIPANT PERSPECTIVES





Course Participants Perspectives

- Why you took the course?
- What you learned from the course?
- How do you plan to.... or how do you use.... the information learned in the course at work?









↑ informatics CADEMY

Can't wait until 2018?

- We offer the online modules we use in the course as a standalone offering called: IT Lifecycle Fundamentals for Public Health
- Good option for people who:
 - Want a completely self-paced experience OR
 - Are unable to commit to an 8 week experience OR
 - Need exposure to the content but don't have much practical experience in public health
- Cost is \$399 for access to all 10 modules



Want more information?

- Visit phii.org and sign-up for the newsletter
- For all Informatics Academy offerings, visit
 Informaticsacademy.org, then Course Catalog
- We also offer several free courses, including 3 specifically for IIS
- Contact me at <u>tdussault@phii.org</u> or <u>informatics.academy@phii.org</u> with suggestions for training you need.







QUESTIONS, COMMENTS, DISCUSSION?



THANKS SO MUCH!