

ABSTRACT

Virtual public health informatics training: development and delivery of an online public health informatics course

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Objective

This poster describes the development and delivery of an online American Medical Informatics Association (AMIA) 10 × 10 Public Health Informatics course at the University of Utah.

Introduction

Public health informatics is an emerging interdisciplinary field that uses information technology and informatics methods to meet public health goals. To achieve these goals, education and training of a new generation of public health informaticians is one of the essential components. AMIA's 10 × 10 program aims to realize the goal of training 10,000 health care professionals in applied health and medical informatics by the year 2010.¹ The Department of Biomedical Informatics of the University of Utah was established in 1964. As one of the largest biomedical informatics training programs in the world, the department is internationally recognized as a leader in biomedical informatics research and education.² The poster hereby describes the collaborative effort between Utah and AMIA to develop a public health informatics online course.

Methods

The course was developed based on the classroom version of the Public Health Informatics course taught in the Biomedical Informatics Department, with input from practitioners at the Utah Department of Health. The course contains six modules:

- Describe the mission and practice of public health and identify opportunities using informatics methods and tools;
- Describe fundamental informatics principles and their application to public health, including database design and process diagramming;

- Examine standards relevant to public health and create design artifacts to enable system interoperability;
- Describe the current and evolving relationship between clinical and public health systems;
- Examine roles required to develop and manage public health informatics projects and systems.

Each module contains a guidance file, one or more voice-over-power-point lectures, readings and resources, a short quiz and/or discussion. A student project was also developed for the students to look into a current public health information system of their own choice. An in-person session was planned at the end of course for the students to present their projects. Feedback was collected by distributing a student evaluation questionnaire to each student at the in-person session.

Results

The course was delivered from 18 January to 10 May 2010 using Blackboard Vista, the University of Utah's online

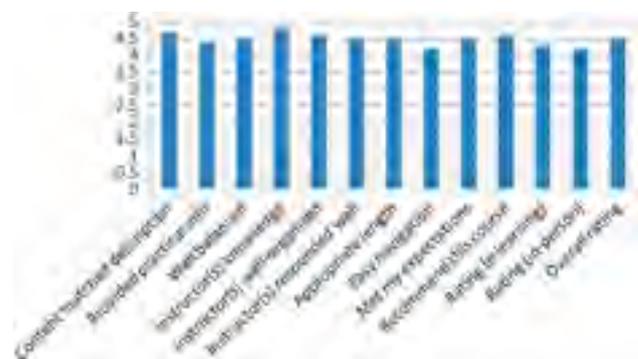


Figure 1 Average scores of students' evaluation of the Utah-AMIA 10 × 10 Public Health Informatics online course.

teaching resource. Fifteen students from Puerto Rico to California had various backgrounds from clinician, public health practitioner, to business development manager. Twelve students described surveillance workflows and information process at the in-person session before the AMIA NOW! conference. The students highly scored the course (Figure 1) and made comments such as: 'It covered a broad range of skills and knowledge relevant to public health informatics.' 'A new professional field, I would like to continue in this field (public health informatics).'

Conclusions

The Utah-AMIA 10 × 10 Public Health Informatics online course successfully introduced clinicians and public health practitioners to informatics principles and their

application to public health problems. With a high level of satisfaction, students developed basic analysis and lifelong-learning skills to engage in the evolving field of public health informatics.

Acknowledgements

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References

- 1 AMIA 10 × 10. Available at <https://www.amia.org/10x10>.
- 2 About the Department. Available at <http://www.bmi.utah.edu/?pageId=2182>.