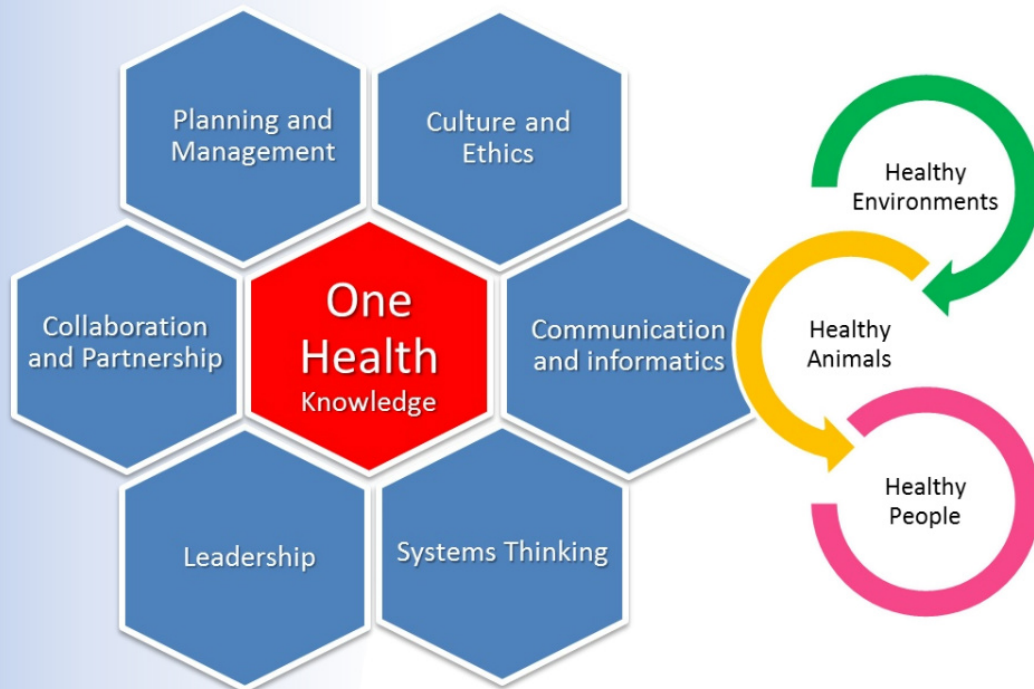2017 | Facilitator's Guide

Training of the Trainers:

Integrating One Health Core Competencies for Multi-disciplines Workforce

Organized by **Faculty of Veterinary Medicine**
Faculty of Education
Kasetsart University

July 12th – 13th, 2017

Bangsaen Heritage Hotel, Chonburi

TABLE OF CONTENTS

TABLE OF CONTENTS (Cont.)

INTRODUCTION

One Health approach recognized that the health of human, animals and environment are interdependent and that promoting optimal health in any of these sectors requires cross-sectoral collaboration, communication and respect. The multidisciplinary nature of One Health approach need One Health professionals are proficient in knowledge, skill, behaviors and attitudes that go beyond the discipline-specific knowledge. One Health core competencies is critical to prepare One Health workforce to tackle the complex health threats by working collaboratively. Education and training programs which incorporate these core competencies will create the workforce for better able to address One Health challenges.

The faculty of Veterinary Medicine and Faculty of Education, Kasetsart University, Bangkok is the members of Thailand One Health University Network (THOHUN). The staffs from both faculties have experiences on working and providing knowledge on One Health education and researches. Training program for integrating One Health Core Competencies for Multi-disciplines Workforce have shown to be one of the joint collaboration that successfully conducted by 2 faculties.

This training of the trainers: integrating One Health Core Competencies for Multi-disciplines Workforce is part of One Health core competencies educational and training designed to be a source of information training workshops focused on One Health professionals responsible for human, domesticated animal, wildlife and ecosystem/environmental health. Professional lecturers from 14 faculties of Kasetsart University are invited to this training workshop that will enable them to better coordinate and implement One Health Core Competency teaching modules and to harmonize their professional skills guided by One Health Core Competency domains. This training workshop is held at Bangsaen Heritage Hotel, Chonburi, Thailand during July 12th-13th, 2017.

Course: "Training of the Trainers: Integrating One Health Core Competencies for Multi-disciplines Workforce"

Course Description and Learning Outcomes

In this course, participants will learn how to apply One Health approach in their curriculum and student activities and effectively multidisciplinary collaboration among their organization to teach One Health future workforce.

The goals are to:
- Increase exposure to and improve inter-professional collaboration on application of One Health Core Competency (OHCC) in undergraduate students teaching.
- Provide practical strategies useful for teaching One Health.
- Improve cooperation and multidisciplinary collaboration among professional lecturer interested in the One Health principle.

Key outcomes of the module are the ability to:
- Understand One Health Core Competencies
- Understand core concepts of systems thinking and their application
- Define communication techniques and tools to deal with various audience
- Define stakeholder/organization and practice multidisciplinary collaboration among those organizations for problem solving
- Practice and present how to deliver effectively communication on AMR
- Apply One Health concepts for curriculum and student activities
- Design, prepare and planning for teaching OH future workforce

Target Learner

University Lecturer, One Health Partners, Practitioners and Professionals

Learning Map – Use this section to sequence the learning, to build from basic foundations to course summary. This helps both you and your learners understand expected progress.

One Health Core Competencies

System Thinking

Teaching One Health in future workforce

Multidisciplinary collaboration: Rabies

Introduction to Risk Communication: AMR
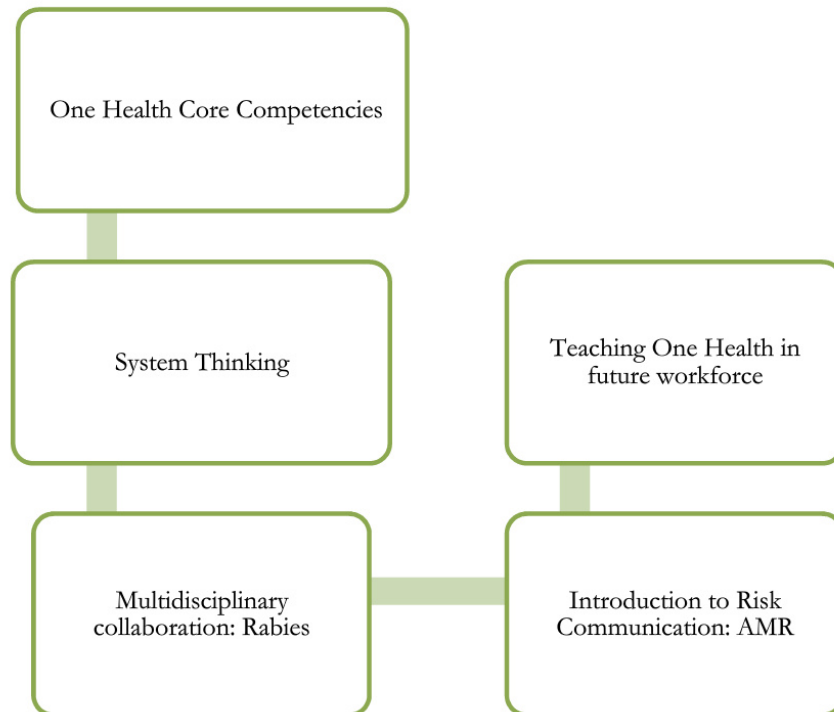
Course Competencies

Competency #1	Learning Objectives to Develop Competency
Communications and informatics	Learning objective 1: ▪ To define communication techniques to deal with various audiences ▪ To practice and present how to deliver effective communication ▪ To select appropriate techniques to convey massages with suitable language and manner using AMR case scenario

Competency #2	Learning Objectives to Develop Competency
System thinking	Learning objective 2: ▪ To Understand core concepts of systems thinking and their application

Competency #3	Learning Objectives to Develop Competency
Collaboration and partnership	Learning objective 3: ▪ To enable define stakeholders and organizations ▪ To practice multidisciplinary working among organizations for problem solving using rabies free university concept ▪ To build the network and collaboration among professional lecturers

Module Overview

Time	Topic – what will you cover in each session?	Materials – What will the instructor use in each session?	Responsible person
25 min	▪ Course overview ▪ Introduction to One Health ▪ One Health core competencies (OHCC)	▪ Computer, LCD projector, screen/blank wall ▪ Module PowerPoint ▪ Handouts	▪ PA
20 min	▪ Thailand One Health University Network (THOHUN)	▪ Computer, LCD projector, screen/blank wall ▪ Module PowerPoint ▪ Handouts	▪ SM
45 min	▪ Contagious classroom	▪ Computer, LCD projector, screen/blank wall ▪ Module PowerPoint	▪ IC and KU staff
30 min	▪ Ice breaking activities	▪ Materials to create games	▪ OB and team
90 min	▪ System thinking and Practice	▪ Flipchart or whiteboard with markers ▪ Computer, LCD projector, screen/blank wall ▪ VDO clip ▪ Module PowerPoint ▪ Handouts	▪ JT and OT
120 min	▪ Team Building and Trust ▪ Integrating OHCC for teaching on case based learning using Rabies	▪ Materials to create activities ▪ Flipchart or whiteboard with markers ▪ Computer, LCD projector, screen/blank wall ▪ Module PowerPoint ▪ Handouts	▪ WP and team

Time	Topic – what will you cover in each session?	Materials – What will the instructor use in each session?	Responsible person
90 min	▪ Effective Risk Communication: A Guide to Best Practice	▪ Flipchart or whiteboard with markers ▪ Computer, LCD projector, screen/blank wall ▪ VDO clip ▪ Handout	▪ SP and OB
75 min	▪ Group presentation on integrating OHCC for case base teaching	▪ Flipchart or whiteboard with markers ▪ Computer, LCD projector, screen/blank wall	▪ SPP and SY
30 min	▪ "Core Competency for One Health" General Education Course – experience from last year	▪ Computer, LCD projector, screen/blank wall ▪ VDO clip ▪ Handout	▪ PA and team
90 min	▪ Brainstorming on integrating OHCC subjects	▪ Flipchart or whiteboard with markers ▪ Computer, LCD projector, screen/blank wall	▪ WM and KU staff
75 min	▪ One Health Contest: Presentation of OHCC subjects	▪ Flipchart or whiteboard with markers ▪ Computer, LCD projector, screen/blank wall	▪ WM and KU staff
50 min	▪ Wrap up ▪ Reflection & Evaluation	▪ Flipchart or whiteboard with markers ▪ Sticky note ▪ Evaluation form	▪ KU staff

KU Speakers
- PA: Patamabhorn Amavisit
- WP: Waraphon Phimpraphai
- OT: Ouaypon Tungthongchai
- NK: Nattaya Keowmookdar
- SP: Sasithep Pitiporntepin
- OB: Oraphan Butkatanyoo
- MH: Manasanun Hatthasak
- SPP: Somkid Prabpai
- NKK: Nannapat Ketkosan
- SY: Saengchai Yingsakmongkol

MU Speakers
- SM: Saengduen Moonsom
- WM: Walasinee Moonamart
- JT: Jongdee To-im
- IC: Irwin F Chavez

PRE-WORK
Will you expect the students/learners to do anything before the first class session? If so, explain that here?

Learning Objective: For pre-work

Type of Learning: Reading, writing, watch video, etc.?

Timing: NA

Equipment and Materials: None

Detailed Facilitator Notes

Pre-work
Assignment

Welcome Note and First Assignment

No available pre-work assignment

1. Introduction to One Health and OHCC

Learning Objective:
- Review of the important of One Health and activities in the training
- Review of One Health Core Competency (OHCC)

Type of Learning: Class lecture

Timing: 25 Minutes

Equipment and Materials:
- Handout/ module Power Point
- Computer, LCD projector, screen/blank wall

Detailed Facilitator Notes

Lecture
(Appendix 1, 2
and 3 –
Module
Handout)

25 Minutes

Course Overview

Give a quick overview of One Health and One Health core competencies and provide references sources for self-study

2. Thailand One Health University Network (THOHUN)

Learning Objectives:
- Review of THOHUN focusing on roles and activities for One Health teaching and research

Type of Learning: Class lecture

Timing: 20 Minutes

Equipment and Materials:
- Module PowerPoint
- Computer, LCD Projector, Screen/ Blank Wall

Detailed Facilitator Notes

Lecture   20 Minutes   **THOHUN**
Give a quick overview of Thailand One Health University Network (THOHUN) and the activities of THOHUN NCO

3. Contagious Classroom

Learning Objectives:	▪ Experience a disease outbreak and investigation. ▪ List the typical steps followed in a disease outbreak investigation.
Type of Learning:	Game, Large Group Debrief
Timing:	45 Minutes
Equipment and Materials:	▪ Computer, LCD projector, screen/blank wall ▪ Flipchart or whiteboard with markers ▪ Module PowerPoint ▪ Test tube or cups, and dropper/transfer pipette for each participant. ▪ Distilled water ▪ 0.1 molar sodium hydroxide (NaOH) Phenolphthalein indicator solution, dissolved in alcohol and diluted in water (pH indicator)

Detailed Facilitator Notes

Large group Debrief

45 minutes

Simulating an Epidemic

Using simple reagents, participants will simulate the spread of a simple imaginary disease in order to explore some factors that affect the rate of infection, the challenges of epidemiology, and methods to investigate and describe disease outbreaks.

▪ Let participants know they are going to model the transmission of a disease by exchanging some of their containers' contents with that of other participants. Mention that one of the containers is "infected" with an imaginary infectious disease.

Tracing the Source of Infection

▪ Now that a portion of the group has been "infected," put participants in the role of epidemiologists. Their challenge is to collect data that will help them trace the path of the epidemic, locate the original carriers and describe the outbreak using appropriate terms.

▪ As a group, use the data to try to deduce which individual was the original carrier of the disease.
  ○ Why might it be important to locate the source of infection?
  ○ What difficulties arise in trying to collect and interpret data? Note that the simulated disease has a 100% rate of infection that appears immediately under testing. Some infections, such as HIV and chicken pox, can remain dormant in the body for a long time. Others, such as Ebola, kill the host rapidly.
  ○ How might each of these factors affect the spread of disease and the ability to identify carriers?

4. Ice Breaking

Learning Objectives:
- Ice breaking
- Creative self-introduction
- Fun with One Health and OHCC

Type of Learning: Games, large and small group activities

Timing: 30 Minutes

Equipment and Materials:
- Materials to create games: Kahoot ! Random Name Picker.

Detailed Facilitator Notes

30 Minutes

Large group activities

Ice Breaking
Participants perform creatively self-introduction including name, education level, discipline and One Health experiences.

5. System Thinking

Learning Objectives: Understand core concepts of systems thinking and their application by:
- Accurately describing key systems concepts (e.g., complex, complicated and adaptive systems)
- Understanding what is distinctive about systems thinking as opposed to other forms of thinking (e.g., logical, causal, etc.)
- Evaluating the advantages and implications of taking a systems approach to understanding problems and situations.

Create systems maps of problems and situations by:
- Identifying the essential elements of the problem and situation.
- Identifying the connections between the components and factors such as One Health Problem will be included humans, animals and the environment.
- Mapping the integration points where individual system elements (e.g., social networks, organizations, government, communities, and ecosystems) interact.

Type of Learning: Class lecture, small group activity and large group discussion

Timing: 1 Hour 30 Minutes

Equipment and Materials:
- Module PowerPoint Presentation
- Flipchart or whiteboard and markers
- Computer, LCD projector, screen/blank wall
- VDO clip
- Materials to create a poster (flipchart paper, markers)
- Handouts

Detailed Facilitator Notes

Key outcomes of this module are the ability to:
- Use systems thinking to create maps of complex and complicated systems that include human, animal, environment and ecological components.
- Operate as part of a team that uses systems maps to integrate information from multiple disciplines and sectors, to develop strategies to address challenges and to anticipate and mitigate potential unintended consequences of One Health actions and situations.

Contribute as a team member to developing solutions to problems by:

Lecture (Appendix 4- Power Point)

10 Minutes
- Introduction to Systems Thinking Module

35 Minutes
- What is Systems Thinking?

  Group working on Learning challenge and Exploration and then create a poster for sharing the learning.

Small Group Activities

20 Minutes
- Using concepts from "wicked" problem/"super wicked" problem theory to better understand how to formulate and approach challenges

20 Minutes
- Integrating information and actions across disciplines and sectors using systems thinking tools.
- Identifying leverage points for maximum impact.
- Determining and mitigating unintended consequences of planned interventions.

Large Group activities

5 Minutes
- Creating essential feedback and feed-forward loops.

6. Integrating OHCC for Teaching Case Based Learning

Learning Objectives:
- To builds understanding of and aptitude in the basic principles of collaboration and partnership, in the context of a One Health approach to addressing complex health challenges using Rabies as a model

Type of Learning: Class lecture, small group activity and large group discussion

Timing: 3 Hour 15 Minutes

Equipment and Materials:
- PowerPoint Presentation
- Flipchart or whiteboard and markers
- Computer, LCD projector, screen/blank wall

Detailed Facilitator Notes

Lecture
(Appendix 5- Power Point

10 Minutes

Rabies Free University
Lecture on rabies for disease management plan. The lecture covers the following points:

- rabies causes, reservoirs and transmission
- epidemiology of rabies in global and regional level
- rabies control measures

Small Group Activities

30 Minutes Games: Team building and Trust

10 Minutes Explanation of small group activity
Divide participants into 5 groups including multidiscipline professionals in each group. Facilitators will provide flip chart and markers that will be used for group working.
Introduction to the scenario- **Rabies Free University** with the number of dogs and additional information

25 Minutes Brainstorming and group discussion to identify these following points:
- Things to do to achieve the goal
- Stakeholder mapping
- Roles of each discipline
- How to conduct effective collaboration among multidiscipline?

Large group activities	20 Minutes	Group presentation and discussion Facilitators encourage the participants to discuss and give their opinion about One Health concept to identify the stakeholders and their roles to manage complex health issue using rabies as a model.
Small group discussion	25 Minutes	Group working and discussion Based on the theme Rabies Free University, after presentation the groups get back to work together for thinking about application of One Health approach to control rabies into their subjects and student activities.
Large group activities	75 Minutes	Group presentation and discussion Facilitators encourage the participants to discuss and give their opinion about how to apply One Health approach to collaborate among disciplines for teaching or conduct an activity for rabies control in university level.

7. Effective Risk Communication

Learning Objectives:

- To build up the understanding on effective communication and risk communication
- To practice communication skills
- To successfully deliver the risk messages

Type of Learning: Class lecture, small group activity and large group discussion

Timing: 1 Hour 30 Minutes

Equipment and Materials:
- PowerPoint Presentation
- Flipchart or whiteboard and markers
- Computer, LCD projector, screen/blank wall
- VDO clip
- Handout

Detailed Facilitator Notes

Lecture
(Apendix 6-Power Point)

10 Minutes

Antimicrobial Resistance
Introduction to communication skill by using the open question
- What is communication?
- Effective communication and how?
- Way of communication and tools?

Small Group Activities
(Appendix 7-Handout

30 Minutes

Introduction to risk communication
- How did you communicate about the risk to the other person?
- Was your communication well received?
- What made your message effective or ineffective?

Large group activities

50 Minutes

Delivering risk communication messages
Introduction to the scenario- **Noo dee go to see the doctor** with the additional information
Group working and discussion

8. OHCC and General Education Course-Experience from Last Year

Learning Objectives:	Review of One Health Core Competency (OHCC) classroom
Type of Learning:	Class lecture, VDO presentation
Timing:	30 Minutes
Equipment and Materials:	▪ Computer, LCD projector, screen/blank wall ▪ VDO clip ▪ Handout

Detailed Facilitator Notes

Lecture
(Apendix 8-
Handout)

30 Minutes   **General Education course introduction**

Give a quick overview of applying One Health core competencies in to general education.

9. Brain storming on Integrating OHCC Subjects

Learning Objectives:	Application of One Health Core Competency (OHCC) to course module
Type of Learning:	Class lecture, Group working and presentation
Timing:	3 Hours
Equipment and Materials:	▪ Computer, LCD projector, screen/blank wall ▪ Power Point Presentation

Detailed Facilitator Notes

Lecture (Apendix 9-Power Point)	30 Minutes	**Course Overview** Give a quick overview of applying One Health core competencies for One Health module to interprofessional education.
Small Group Activities	1 Hour	Group working and discussion Choosing at least one of OHCC to integrated with interprofessional education
Large group activities	1 Hour 15 Minutes	One Health Contest: Presentation of OHCC for interprofessional education

Appendix

Appendix **1**

Handout - Operation Manual for Curriculum Mapping of
Thai One Health Core Competency Domains and
Evaluation Planning

Appendix **2**

Handout - Introduction to One Health

Appendix **3**

Handout - One Health : How can Nurse be Involved

Appendix **4**

Power Point - System Thinking and Practice

Appendix **5**

Power Point - Integrating One Health Core Competencies for Teaching on Case Based Learning

Appendix **6**

Power Point - Effective Risk Communication :
A Guide to Best Practice

Appendix **7**

Handout - Effective Risk Communication :
A Guide to Best Practice

Appendix **8**

Handout - Course Syllabus

Appendix **9**

Power Point - Teamwork : Brainstorming on Integrating
One Health Core Competencies