University of Minnesota Medical School
Department of Family Medicine and Community Health

Teaching, Evaluation, and Curriculum for Healthcare Professionals (TEACH) Detailed Course Sessions Outline

SESSION 1 – JANUARY

Objectives

1. Utilize a systems approach to curriculum development
    a. List the steps toward conducting a systematic approach to curriculum development
    b. Define each of the elements of a systems approach to curriculum development
    c. Distinguish the differences between both learner and program goals and objectives
2. Perform the planning steps in a systems approach to curriculum development
    a. Write learner and program goals and objectives
    b. Analyze the institutional environment (i.e., stakeholder analysis)
    c. Pre-assess student characteristics (as part of needs assessment)
    d. Delineate resources and constraints available for curriculum development
3. Discriminate between a general and targeted needs assessment as part of problem identification
    a. State a succinct description of a curriculum problem that needs attention
    b. Describe the differences between a general and targeted needs assessment and provide examples of both forms of needs assessment
    c. Critique several needs assessment methods toward addressing local instructional problems needing curricular development

Session Topics

- Introductions
- Logistics
- Curriculum development overview
- Pre-assessment
- Class exercise
- Needs assessment
- Project Overview
- Class evaluation

Assignments

- Bring ideas for course projects
- Search UM eBook Library for course text:
    - Thomas PA, Kern DE, Hughes MT, Chen BY. *Curriculum Development for Medical Education: A Six-Step Approach*. 3rd ed. Baltimore, Maryland: Johns Hopkins University Press; 2016.
- Required reading:

- Chapters 1-3 (pages 1-49) of *Curriculum Development for Medical Education: Six-Step Approach*

SESSION 2 - FEBRUARY

Objectives

1. Interpret learning theory as it applies to medical education
    a. Explain principles of learning and motivation
    b. Predict the effect of principles of learning in different teaching situations
    c. Apply principles of learning and motivation in teaching to enhance learning outcomes
2. Perform the planning steps in a systems approach
    a. Write course goals
    b. Write education objectives from identified goals

Session Topics

- Education theory
- Project discussion
    - Topic ideas and rationale
- Project work time/meet with mentor
- Writing goals and objectives
- Objective writing exercise
- Class evaluation

Assignments

- Identify group projects
- Bring in information on resources, constraints, and environment
- Bring in a problem statement
- Bring in statement about needs assessment
- Required readings:
    - Mayer RE. Applying the science of learning to medical education. *Med Educ*. 2010;44(6):543-9.
    - Clark RE, Pugh CM, Yates KA, Inaba K, Green DJ, Sullivan ME. The use of cognitive task analysis to improve instructional descriptions of procedures. *J Surg Res*. 2012;173(1):e37-42.
    - Thomas PA. Goals and Objectives. In: Thomas PA, Kern DE, Hughes MT, Chen BY, eds. *Curriculum Development for Medical Education: A Six-Step Approach*. 3rd ed. Baltimore, Maryland: Johns Hopkins University Press; 2016.

SESSION 3 - MARCH

Objectives

1. Perform second stage planning steps in a systems approach to curriculum development
    a. Apply guidelines for selecting teaching strategies
    b. Justify the selection of teaching strategies suitable for local curricular implementation
2. Perform a lecture

a. Demonstrate effective use of feedback
b. Demonstrate effective use of various questioning types
c. Demonstrate effective use of various reinforcements
d. Demonstrate effective use and selection of media

3. Interpret models and skills for office-based teaching
    a. Describe characteristics of effective teaching
    b. Design strategies to prepare yourself and your office for successful and productive teaching
    c. Create learner expectations for an office visit
    d. Describe case based learning
    e. Demonstrate knowledge of when and how to incorporate the seven models of precepting in your teaching

Session Topics

- Teaching strategies
- Office based teaching
- Progress reports and project discussion
- Project work time
- Lecture skills
- Class evaluation

Assignments

- Bring in goals and objectives
- Required Readings:
    - Thomas PA, Abras CN. Educational Strategies. In: Thomas PA, Kern DE, Hughes MT, Chen BY, eds. *Curriculum Development for Medical Education: A Six-Step Approach*. 3rd ed. Baltimore, Maryland: Johns Hopkins University Press; 2016.
    - Stuart J, Rutherford RJ. Medical student concentration during lectures. *Lancet*. 1978;2(8088):514-6.
    - Schroeder CM, TP Scott, H Tolson, TY Huang, YH Lee. A meta-analysis of national research: Effects of teaching strategies on student achievement in science in the United States. *JRST*. 2007;44(10):1436-60.

SESSION 4 - APRIL

Objectives

1. Describe the basic principles of learner evaluation as part of a systems approach
    a. Identify where and why evaluation is part of the systems approach
    b. Design evaluation strategies for curriculum development
2. Explain the steps toward successfully employing demonstration as a teaching strategy.
    a. Discuss several of the challenges and rewards for teaching using demonstration as a teaching method.
    b. Recall the steps in teaching a demonstrated skill
    c. Develop a skills-based checklist for demonstrating a skill
3. Summarize methods and concepts of an effective scholarly poster.
    a. State the purposes for scholarly posters
    b. Distinguish the elements of good and bad scholarly poster presentations

Session Topics

- Evaluation I: Program vs curriculum
- Progress reports and project discussion
- Demonstration
- Poster presentations
- Panel
    - Teaching challenges
    - Where we get stuck
- Class evaluation

Assignments

- Bring in teaching strategies
- Required reading:
    - Hughes MT. Implementation. In: Thomas PA, Kern DE, Hughes MT, Chen BY, eds. *Curriculum Development for Medical Education: A Six-Step Approach*. 3rd ed. Baltimore, Maryland: Johns Hopkins University Press; 2016.

SESSION 5 - MAY

Objectives

1. Describe the basic principles of program evaluation
    a. List steps toward conducting a program evaluation
    b. Discuss pros and cons of various program evaluation strategies
2. Facilitate a small group discussion
    a. Demonstrate effective use of feedback
    b. Demonstrate effective use of rapport
    c. Demonstrate effective use of various questioning types
    d. Demonstrate effective use of various reinforcements
    e. Demonstrate effective use and selection of media
3. Summarize the process of turning curriculum projects into research
    a. Discuss the difference between scholarship and research
    b. Examine ways to disseminate scholarly work
    c. Review the steps needed to transform scholarly work into research
    d. Learn how to engage learners to partner with faculty in scholarship and research

Session Topics

- Lecture/discussion: Evaluation Strategies II
- Small group teaching
- Progress reports and project discussion
- Project Work Time
- Turning Projects into Research
- Class evaluation

Assignments

- Bring in evaluation strategies
- Required reading:

- Lindeman BM, Lipsett PA. Evaluation and Feedback. In: Thomas PA, Kern DE, Hughes MT, Chen BY, eds. *Curriculum Development for Medical Education: A Six-Step Approach*. 3rd ed. Baltimore, Maryland: Johns Hopkins University Press; 2016.

SESSION 6 - JUNE

Objectives

1. Explain the curriculum development process for a local educational project
2. Discuss a proposed plan for locale implement of a local educational project
3. Summarize the curriculum development and proposed implementation plans of other participants' project toward identification of best-practices

Session Topics

- Final project presentations
  - Group 1: 40 minutes (3:00-3:40)
  - Group 2: 40 minutes (3:40-4:20)
  - Group 3: 40 minutes (4:20-5:00)
- Wrap up and final class evaluation: 30 minutes (5:00-5:30)
- Reception

Assignments

- Present final project during a poster session at Resident and Fellow Commencement