### National Taiwan University Graduate Institute of Physical Therapy

#### Evidence-Based Physical Therapy,

### http://www.pt.ntu.edu.tw/mhh/course/semi/ EBM

Course number: 428 D0390 (2 credit hours, required)

Instructors: Ming-Hsia Hu (principal instructor), Ying-Tai Wu, Suh-Fang Jeng, Jau-Yih Tsauo

Teaching Assistant: N/A

**Participants:** First year doctoral students in the graduate institute of physical therapy

Prerequisite: None

Class meeting time: Wednesday 15:30-17:20

Classroom: Physical Therapy Seminar Room (II)

Principal Instructor contact information: Room 312, No. 17, XuZho Road; 33668137;

mhh@ntu.edu.tw

Discussion hour: by appointment

#### Course Introduction:

In order to ensure quality patient care, physical therapy service should be based on clinically relevant scientific evidences. The purpose of this course is to equip the students with the ability to practice with the best available evidence. This course is organized as the paired course for the "Physical Therapy Clinical Decision-Making." Both coursed are required courses for the doctoral students enrolled into the Graduate Institute of Physical Therapy at the National Taiwan University.

**Course Objectives:** At the end of this semester, the students should be able to

- 1. Understand the scope and define the evidence-based physical therapy in health care system
- 2. Execute steps necessary to provide physical therapy service with best evidences, including forming the questions, searching for evidences, conducting meta-analysis for systematic reviews, evaluate the evidence, etc.
- 3. Exercise evidence-based physical therapy based on best available current evidences, including clinical guidelines
- 4. Exercise writing up of a clinical guideline in the format of Hook on Evidence by

5. Complete a meta-analysis of selected topics.

Timetable: as listed in the timetable file.

**References** (Listed alphabetically by authors):

- 1. Jewell DV. Guide to Evidence-Based Physical Therapy Practice. Jones & Bartlett Pub, 2008. (required reading)
- 2. Bury T, Mead J. Evidence-Based Healthcare: A Practical Guide for Therapists. Oxford: Butterworth Heinemann, 1998.
- 3. Hammell KW, Carpenter C. Qualitative Research in Evidence-Based Rehabilitation. Edinburgh: Churchill Livingstone, 2004.
- 4. Helewa A, Walker JM. Critical Evaluation of Research in Physical Rehabilitation: Towards Evidence-Based Practice. Philadelphia: WB Saunders, 2000.
- 5. Law M. Evidence-Based Rehabilitation: A Guide to Practice. Thorofare NJ: SLACK, 2002.
- 6. Domholdt E. Rehabilitation Research: Principles and Applications, 3rd ed. Philadelphia: Elsevier Saunders, 2005. Chap 5, 10, 12, 23.
- 7. Straus SE, Richardson WS, Rosenberg W, Haynes RB. Evidence-Based Medicine: How to Practice and Teach EBM, 2nd ed. Edinburgh: Churchill Livingstone, 2005. (mandatory)
- 8. APTA Clinical Guidelines.
- 9. CSP Clinical Guidelines.

**Scoring**: participation in class (single article and clinical guidelines report) 40%, report on metaanalysis (with power point file) 30%, final paper (Hook on Evidence format) 30%

# Evidence-Based Physical Therapy, 2010

# Course Syllabus

Meeting Time: Wednesday 15:30-17:20

Week	Date	Instructor	Theme	reading/reference
1	9/15	Ming-Hsia Hu	What is evidence-based healthcare? Evidence-based practice and physical therapy.	Bury & Mead Chap 1 Law, chap 1
2	9/22		中秋節(放假日)	
3	9/29	Ying-Tai Wu	Asking answerable clinical questions Student: decide question for final paper	Jewell chap 4 Straus et al., Chap 1
4	10/6	Jau-Yih Tsauo	Meta-analysis and preparation for final report	Helewa & Walker, chap 7
5	10/13	Ming-Hsia Hu	Finding the evidence (computer room or bring your own) Student: decide on 1-3 main articles for final paper	Bury & Mead, chap 6 Straus et al., chap2 Helewa & Walker, chap 8
6	10/20	Ming-Hsia Hu	Finding and appraising the evidence (appraisal tools review) Student: decide appropriate appraisal tools and appraise 1 article found	Straus et al., chap 2 Helewa & Walker, chap 2, 3
7	10/27	Suh-Fang Jeng	Critical appraisal of diagnosis and screening Student (group discussion): critical appraisal of one article on diagnosis and screening	Straus et al., chap 3 Helewa & Walker, chap 4
8	11/3	Jau-Yih Tsauo	Critical appraisal of therapy effect Student (group discussion): critical appraisal of one article on therapy effect	Straus et al., chap 5 Helewa & Walker, chap 5
9	11/10	Suh-Fang Jeng	Critical appraisal of prognosis and outcome Student (group discussion): critical appraisal of one article on outcome	Straus et al., chap 4
10	11/17	Ying-Tai Wu	Considering the harm Student (group discussion): critical appraisal of one article on harm	Straus et al., chap 5
11	11/24	Ming-Hsia Hu	Current evidences and clinical guidelines in neurological physical therapy Student (group discussion) on one	Bury & Mead, chap 8 Law chap 11

			recent clinical guidelines in neurological physical therapy	
12	12/1	Ying-Tai Wu	Current evidences and clinical guidelines in cardiopulmonary physical therapy Student (group discussion) on one recent clinical guidelines in cardiopulmonary physical therapy	Bury & Mead, chap 8  APTA, CPS guidelines
13	12/8	Jau-Yih Tsauo	Current evidences and clinical guidelines in orthopedic physical therapy Student (group discussion) on one recent clinical guidelines in orthopedic physical therapy	Bury & Mead, chap 8  APTA, CPS guidelines
14	12/15	Suh-Fang Jeng	Current evidences and clinical guidelines in pediatric physical therapy Student (group discussion) on one recent clinical guidelines in pediatric physical therapy	Bury & Mead, chap 8  APTA, CPS guidelines
15	12/22	Jau-Yih Tsauo	Using qualitative evidence as a basis for evidence-based practice	Hammell & Carpenter, chap 1, 9, 11
16	12/29	Ming-Hsia Hu	Multiple case-study research design Student: each present an article using case-study design	Dombolt, chap 5, 10, 12, 23
17	1/5	Hu, Wu, Tsauo, Jeng	Student: Meta-analysis oral report	
18	1/12	Hu, Wu, Tsauo, Jeng	Student: Final Exam: turn in paper report by 5:00 pm	