

## COURSE OUTLINE

**1.รหัสและชื่อรายวิชา :**

PRDE662 : INDIRECT TECHNIQUES FOR DEMOGRAPHIC ESTIMATION 3(3 -0 -0 )

วปช๖๖๒ : เทคนิคการประมาณประชากรโดยวิธีอ้อม 3(3 -0 -0 )

**2. หลักสูตรและประเภทของรายวิชา :**

หลักสูตรปริญญาตรีบัณฑิต สาขาวิชา ประชากรศาสตร์ประยุกต์และการวิจัยทางสังคม (หลักสูตรนานาชาติ)เป็นรายวิชาในหมวดวิชาบังคับ

**3. วัตถุประสงค์ของรายวิชา**

**4. อาจารย์ผู้รับผิดชอบรายวิชา :**

**5. แผนการสอน :**

สัปดาห์ที่ /ครั้งที่	หัวข้อ	จำนวนชั่วโมง			อาจารย์ผู้สอน
		บรรยาย	ปฏิบัติ	ศึกษด้วยตัวเอง	
1	* Overview of the course * Demographic indicators - Review direct demographic measurement of fertility, mortality, migration * Evaluating quality of data - Review methods to detect age accuracy and data consistency	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
2	*Stable population *Demographic models *Model life tables and their applications	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
3	*Fertility estimation - Evaluation of summary fertility data from censuses	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
4	*Fertility estimation using number of children ever born - Brass method (P/F ratio) - Cohort parity increments - P/F ratio methods with survey data	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
5	*Fertility estimation using number of children ever born - The relational Gompertz model - Synthetic relational Gompertz models	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
6	*Fertility estimation using parity progression ratios method *Fertility estimation using reverse-survival method	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
7	*Fertility estimation from survey data containing birth histories *Comparison of mean number of births registered by a cohort of women with the reported average parity of the same cohort	-	-	-	ศ.ดร. ปัทมา ว่าพัฒนางศ์
8	*Child mortality estimation - Census method - Survey data methods	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
9	*Adult mortality estimation from information on the distribution of deaths by age - The Brass Growth Balance method - The Preston & Coale method	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
10	*Adult mortality estimation from information on the distribution of deaths by age - The Generalized Growth Balance method - The Synthetic Extinct Generation method	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
11	*Adult mortality estimation from orphanhood *Adult mortality estimation from data on siblings	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
12	*Maternal mortality estimation - Pregnancy-related mortality from survival of siblings *Pregnancy-related mortality from deaths reported by households	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์
13	* Using models to derive life tables from incomplete data	3	0	6	ศ.ดร. ปัทมา ว่าพัฒนางศ์

14	*Migration estimation from census data	3	0	6	ศ.ดร. ปัทมา วาฬผินวงศ์
15	*Migration estimation using multi-exponential model migration schedule	3	0	6	ศ.ดร. ปัทมา วาฬผินวงศ์
16	Presentation of term paper	-	-	-	ศ.ดร. ปัทมา วาฬผินวงศ์

#### 6. เอกสารประกอบการเรียนการสอน :

- Arriaga, Eduardo E. 1994a. Population Analysis with Microcomputers. Volume I: Presentation of techniques. Bureau of the Census, USAID and UNFPA. (pp. 14-34, 62-83, 187-198) Bogue, Donald J. 1969.
- Arriaga, Eduardo E. 1994a. Population Analysis with Microcomputers. Volume I: Presentation of Techniques. Bureau of the Census, USAID and UNFPA. (pp. 147-148) United Nations. 1968. The Concept of a Stable Population: Application to the Study of Populations of Countries with Incomplete Demographic Statistics. Population Studies, No. 39. Department of Economic and Social Affairs. New York. \_\_\_\_\_. 1983. Manual X: Indirect Techniques for Demographic Estimations. New York. (pp. 11-26) (available at [http://unstats.un.org/unsd/demographic/standmeth/handbooks/Manual\\_X-en.pdf](http://unstats.un.org/unsd/demographic/standmeth/handbooks/Manual_X-en.pdf))
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 2-5)
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 6, 11, 13) United Nations. 1983. Manual X: Indirect Techniques for Demographic Estimations. New York. (pp. 27-37, 41-45, 58-64) Suggested reading Brass, William. 1996. Demographic data analysis in less developed countries, 1946
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 7, 10)
- Required reading Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 8-9) Suggested reading Retherford, Robert D., and Lee-Jay Cho. 1978. Age-parity-specific birth rates and birth probabilities from census and survey data on own-children. Population Studies, (32). pp. 567-581. United Nations. 1983. Manual X: Indirect Techniques for Demographic Estimations. New York. (pp. 178-195)
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 12, 14)
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 15-18) Suggested reading Preston, Samuel H., Patrick Heuveline, and Michel Guillot. 2001. Demography: measuring and modeling population processes. Oxford: Blackwell Publishers. (pp.224-233) Trussell, J. and Jane Menken. 1984. Estimating levels, trends, and determinants of child mortality in countries with poor statistics. Population and Development Review, 10 (Supplement: Child Survival: Strategies for Research). pp. 325
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 19-21) Suggested reading United Nations. 1983. Manual X: Indirect Techniques for Demographic Estimations. New York. (pp. 129-146) United Nations. 2002. Methods for estimating adult mortality. Population Division, Department of Economic and Social Affairs. ESA/P/WP 175. (pp. 21-44) (available at <http://www.un.org/esa/population/publications/adultmort/Complete.pdf>)
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 24-25) Suggested reading United Nations. 2002. Methods for estimating adult mortality. Population Division, Department of Economic and Social Affairs. ESA/P/WP 175. (pp. 45-54)
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 22-23, 26-27) Suggested reading United Nations. 2002. Methods for estimating adult mortality. Population Division, Department of Economic and Social Affairs. ESA/P/WP 175. (pp. 55-79)
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 28-30) Suggested reading Merdad, L., K Hill, and W Graham. 2013. Improving the measurement of maternal mortality: the sisterhood method revisited. PLOS One; 8(4), e59834 (open access: <http://www.plosone.org>) World Health Organization and United Nations Children
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 31-33)
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 34-35)
- Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timaeus, and B Zaba (eds). 2013. Tools for demographic estimation. Paris: International Union for the Scientific Study of Population. [demographicestimation.iussp.org](http://demographicestimation.iussp.org) (chapter 36)