

## COURSE OUTLINE

- 1.รหัสและชื่อรายวิชา :** PRDE662 : INDIRECT TECHNIQUES FOR DEMOGRAPHIC ESTIMATION 3(3 -0 -0 )  
 วาปช๖๖๒ : เทคนิคการประมาณประชากรโดยวิธีอ้อม 3(3 -0 -0 )
- 2. หลักสูตรและประเภทของรายวิชา :** หลักสูตรปริญญาตรีบัณฑิต สาขาวิชา ประชากรศาสตร์ประยุกต์และการวิจัยทางสังคม (หลักสูตรนานาชาติ)เป็นรายวิชาในหมวดวิชาบังคับ
- 3. วัตถุประสงค์ของรายวิชา**
- 4. อาจารย์ผู้รับผิดชอบรายวิชา :**
- 5. แผนการสอน :**

| สัปดาห์ที่<br>/ครั้งที่ | หัวข้อ                                                                                                                                                                                                                 | จำนวนชั่วโมง |         |                 | อาจารย์ผู้สอน           |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------|-----------------|-------------------------|
|                         |                                                                                                                                                                                                                        | บรรยาย       | ปฏิบัติ | ศึกษาด้วยตัวเอง |                         |
| 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 วาพัฒน์วงศ์ |
| 2                       | *Stable population *Demographic models *Model life tables and their applications                                                                                                                                       | 3            | 0       | 6               | ศ.ดร. ปัทมา วาพัฒน์วงศ์ |
| 3                       | *Fertility estimation - Evaluation of summary fertility data from censuses                                                                                                                                             | 3            | 0       | 6               | ศ.ดร. ปัทมา วาพัฒน์วงศ์ |
| 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 วาพัฒน์วงศ์ |
| 5                       | *Fertility estimation using number of children ever born - The relational Gompertz model - Synthetic relational Gompertz models                                                                                        | 3            | 0       | 6               | ศ.ดร. ปัทมา วาพัฒน์วงศ์ |
| 6                       | *Fertility estimation using parity progression ratios method *Fertility estimation using reverse-survival method                                                                                                       | 3            | 0       | 6               | ศ.ดร. ปัทมา วาพัฒน์วงศ์ |
| 7                       | *Fertility estimation from survey data containing birth histories<br>*Comparison of mean number of births registered by a cohort of women with the reported average parity of the same cohort                          | -            | -       | -               | ศ.ดร. ปัทมา วาพัฒน์วงศ์ |
| 8                       | *Child mortality estimation - Census method - Survey data methods                                                                                                                                                      | 3            | 0       | 6               | ศ.ดร. ปัทมา วาพัฒน์วงศ์ |
| 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 วาพัฒน์วงศ์ |
| 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 วาพัฒน์วงศ์ |
| 11                      | *Adult mortality estimation from orphanhood *Adult mortality estimation from data on siblings                                                                                                                          | 3            | 0       | 6               | ศ.ดร. ปัทมา วาพัฒน์วงศ์ |
| 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 วาพัฒน์วงศ์ |
| 13                      | * Using models to derive life tables from incomplete data                                                                                                                                                              | 3            | 0       | 6               | ศ.ดร. ปัทมา วาพัฒน์วงศ์ |

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

#### 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)