

COURSE OUTLINE

- 1.รหัสและชื่อรายวิชา : PRDE667 : DEMOGRAPHIC EPIDEMIOLOGY 3(3 -0 -0)
วปข๖๖๑ : วิทยาการระบาดทางประชากร 3(3 -0 -0)
2. หลักสูตรและประเภทของรายวิชา : หลักสูตรปริญญาโทบัณฑิต สาขาวิชา ประชากรศาสตร์ประยุกต์และการวิจัยทางสังคม (หลักสูตรนานาชาติ)เป็นรายวิชาในหมวดวิชาเลือก
3. วัตถุประสงค์ของรายวิชา
4. อาจารย์ผู้รับผิดชอบรายวิชา :
5. แผนการสอน :

สัปดาห์ที่ /ครั้งที่	หัวข้อ	จำนวนชั่วโมง			อาจารย์ผู้สอน
		บรรยาย	ปฏิบัติ	ศึกษาด้วยตัวเอง	
1	Introduction to demographic epidemiology	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
2	Measures of morbidity and mortality, and summary measures of population health	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
3	Summary measure of population health (SMPH) and Health state valuations	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
4	Disability-adjusted life years (DALYs) 1	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
5	Disability-adjusted life years (DALYs) 2	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
6	Health economic evaluation: Cost-effectiveness analysis	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
7	Cost analysis	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
8	Systematic review and meta-analysis	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
9	Decision modelling techniques	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
10	Steps in constructing models	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
11	Presenting results	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
12	Uncertainty analysis 1	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
13	Uncertainty analysis 2	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
14	Second stage filter criteria	3	0	6	ผศ.ดร. พจนา หันจางสิทธิ์
15	Case study: The economics of diagnostic test for Gestational Diabetes Mellitus	3	0	6	-
16	Final examination	-	-	-	ผศ.ดร. พจนา หันจางสิทธิ์

6. เอกสารประกอบการเรียนการสอน :
- Mathers, C. D., Vos, T., Lopez, A. D., Salomon, J., & Ezzati, M. (Eds.). (2001). National Burden of Disease Studies: A Practical Guide (2nd ed.). Geneva: WHO.

- Drummond, M. F., Sculpher, M. J., Torrance, G. W., O'Brien, B. J., & Stoddart, G. L. (2005). *Methods for the Economic Evaluation of Health Care Programmes* (3rd ed.). New York: Oxford University Press.
- Murray, C. J. L., & Lopez, A. D. (Eds.). (1996). *The global burden of disease: a comprehensive assessment of mortality and disability from disease, injuries and risk factors in 1990 and projected to 2020* (Vol. I): Cambridge: Harvard University Press.
- Mathers, C. D., Vos, T., Lopez, A. D., Salomon, J., & Ezzati, M. (Eds.). (2001). *National Burden of Disease Studies: A Practical Guide* (2nd ed.). Geneva: WHO.
- Murray, C. J. L., Salomon, J. A., & Mathers, C. (2000). A critical examination of summary measures of population health. *Bulletin of the World Health Organization*, 78, 981-994.
- Murray, C. J. L. (2002). *Summary Measures of Population Health: Concepts, Ethics, Measurement and Applications*: World Health Organization.
- Murray, C. J. L. (2002). *Summary Measures of Population Health: Concepts, Ethics, Measurement and Applications*: World Health Organization.
- Murray, C. J. L., & Lopez, A. D. (Eds.). (1996). *The global burden of disease: a comprehensive assessment of mortality and disability from disease, injuries and risk factors in 1990 and projected to 2020* (Vol. I): Cambridge: Harvard University Press.
- Murray, C. J. L., & Acharya, A. K. (1997). Understanding DALYs. *Journal of Health Economics*, 16(6), 703-730. doi: 10.1016/s0167-6296(97)00004-0
- Stouthard, M. E., Essink-Bot, M.-L., Bonsel, G. J., Barendregt, J. J., Kramers, P. G., Van de Water, H. P., Van der Maas, P. J. (1997). Disability weights for disease in the Netherlands. Rotterdam: Department of Public Health, Erasmus University Rotterdam.
- Anand, S., & Hanson, K. (1997). Disability-adjusted life years: a critical review. *Journal of Health Economics*, 16(6), 685-702. doi: 10.1016/s0167-6296(97)00005-2
- Begg, S., Vos, T., Barker, B., Stevenson, C., Stanley, L., & Lopez, A. (2007). The burden of disease and injury in Australia 2003. Canberra: AIHW.
- Bundhamcharoen, K., Odtan, P., Phulkard, S., & Tangcharoensathien, V. (2011). Burden of disease in Thailand: changes in health gap between 1999 and 2004. *BMC Public Health*, 11(1), 53.
- Ditsuwan, V., Veerman, L., Barendregt, J., Bertram, M., & Vos, T. (2011). The national burden of road traffic injuries in Thailand. *Population Health Metrics*, 9(1), 2.
- Murray, C. J. L. (2002). *Summary Measures of Population Health: Concepts, Ethics, Measurement and Applications*: World Health Organization.
- Murray, C. J. L., & Lopez, A. D. (Eds.). (1996). *The global burden of disease: a comprehensive assessment of mortality and disability from disease, injuries and risk factors in 1990 and projected to 2020* (Vol. I): Cambridge: Harvard University Press.
- Murray, C. J. L., & Acharya, A. K. (1997). Understanding DALYs. *Journal of Health Economics*, 16(6), 703-730. doi: 10.1016/s0167-6296(97)00004-0
- Stouthard, M. E., Essink-Bot, M.-L., Bonsel, G. J., Barendregt, J. J., Kramers, P. G., Van de Water, H. P., Van der Maas, P. J. (1997). Disability weights for disease in the Netherlands. Rotterdam: Department of Public Health, Erasmus University Rotterdam.
- Anand, S., & Hanson, K. (1997). Disability-adjusted life years: a critical review. *Journal of Health Economics*, 16(6), 685-702. doi: 10.1016/s0167-6296(97)00005-2
- Begg, S., Vos, T., Barker, B., Stevenson, C., Stanley, L., & Lopez, A. (2007). The burden of disease and injury in Australia 2003. Canberra: AIHW.
- Bundhamcharoen, K., Odtan, P., Phulkard, S., & Tangcharoensathien, V. (2011). Burden of disease in Thailand: changes in health gap between 1999 and 2004. *BMC Public Health*, 11(1), 53.
- Ditsuwan, V., Veerman, L., Barendregt, J., Bertram, M., & Vos, T. (2011). The national burden of road traffic injuries in Thailand. *Population Health Metrics*, 9(1), 2.
- Drummond, M. F., Sculpher, M. J., Torrance, G. W., O'Brien, B. J., & Stoddart, G. L. (2005). *Methods for the Economic Evaluation of Health Care Programmes* (3rd ed.). New York: Oxford University Press.
- Gold, M. R., Siegel, J. E., Russell, L. B., & Weinstein, M. C. (1996). *Cost-Effectiveness in Health and Medicine*: Oxford University Press.
- Edejer, T. T.-T. (2003). Making Choices in Health: WHO Guide to Cost-Effectiveness Analysis: World Health Organization.
- Cobiac, L., Vos, T., Doran, C., & Wallace, A. (2009). Cost-effectiveness of interventions to prevent alcohol-related disease and injury in Australia. *Addiction*, 104(10), 1646-1655. doi: 10.1111/j.1360-0443.2009.02708.x
- Cobiac, L. J., Vos, T., & Barendregt, J. J. (2009). Cost-Effectiveness of Interventions to Promote Physical Activity: A Modelling Study. *PLoS Med*, 6(7), e1000110. doi: 10.1371/journal.pmed.1000110
- Cobiac, L. J., Vos, T., & Veerman, J. L. (2010). Cost-Effectiveness of Interventions to Promote Fruit and Vegetable Consumption. *PLoS ONE*, 5(11), e14148. doi: 10.1371/journal.pone.0014148
- Hunchangsith, P., Barendregt, J. J., Vos, T., & Bertram, M. (2012). Cost-Effectiveness of Various Tuberculosis Control Strategies in Thailand. *Value in Health*, 15(1, Supplement), S50-S55. doi: 10.1016/j.jval.2011.11.006
- Lee, T. H., & Emanuel, E. J. (2008). Tier 4 Drugs and the Fraying of the Social Compact. *New England Journal of Medicine*, 359(4), 333-335. doi: 10.1056/NEJMp0804261
- Vos, T., Haby, M. M., Magnus, A., Mihalopoulos, C., Andrews, G., & Carter, R. (2005). Assessing Cost-Effectiveness in Mental Health: Helping Policy-Makers Prioritize and Plan Health Services. *Australian and New Zealand Journal of Psychiatry*, 39(8), 701-712. doi: 10.1080/j.1440-1614.2005.01654.x
- Johannesson, M. (2001). At what coronary risk level is it cost-effective to initiate cholesterol lowering drug treatment in primary prevention? *European Heart Journal*, 22(11), 919-925. doi: 10.1053/euhj.2000.2484
- Prukkane, B., Vos, T., Bertram, M., & Lim, S. (2012). Cost-effectiveness analysis for antidepressants and cognitive behavioral therapy for major depression in Thailand. *Value in Health*, 15(1 Suppl), S3-8. doi: 10.1016/j.jval.2011.11.009
- Drummond, M. F., Sculpher, M. J., Torrance, G. W., O'Brien, B. J., & Stoddart, G. L. (2005). *Methods for the Economic Evaluation of Health Care Programmes* (3rd ed.). New York: Oxford University Press.
- Gold, M. R., Siegel, J. E., Russell, L. B., & Weinstein, M. C. (1996). *Cost-Effectiveness in Health and Medicine*: Oxford University Press.
- Egger, M., Smith, G. D., & Altman, D. G. (Eds.). (2001). *Systematic reviews in health care: meta-analysis in context* (2nd ed.). London: BMJ Publishing Group.
- Drummond, M. F., Sculpher, M. J., Torrance, G. W., O'Brien, B. J., & Stoddart, G. L. (2005). *Methods for the Economic Evaluation of Health Care Programmes* (3rd ed.). New York: Oxford University Press.
- Briggs, A., Sculpher, M., & Claxton, K. (2006). *Decision Modelling for Health Economic Evaluation*. New York: Oxford University Press.
- Buxton, M. J., Drummond, M. F., Van Hout, B. A., Prince, R. L., Sheldon, T. A., Szucs, T., & Vray, M. (1997). Modelling in Economic Evaluation: An Unavoidable Fact of Life. *Health Economics*, 6(3), 217-227. doi: 10.1002/(sici)1099-1050(199705)6:3:3.0.co;2-w
- Drummond, M. F., Sculpher, M. J., Torrance, G. W., O'Brien, B. J., & Stoddart, G. L. (2005). *Methods for the Economic Evaluation of Health Care Programmes* (3rd ed.). New York: Oxford University Press.
- Briggs, A., Sculpher, M., & Claxton, K. (2006). *Decision Modelling for Health Economic Evaluation*. New York: Oxford University Press.
- Buxton, M. J., Drummond, M. F., Van Hout, B. A., Prince, R. L., Sheldon, T. A., Szucs, T., & Vray, M. (1997). Modelling in Economic Evaluation: An Unavoidable Fact of Life. *Health Economics*, 6(3), 217-227. doi: 10.1002/(sici)1099-1050(199705)6:3:3.0.co;2-w
- Drummond, M. F., Sculpher, M. J., Torrance, G. W., O'Brien, B. J., & Stoddart, G. L. (2005). *Methods for the Economic Evaluation of Health Care Programmes* (3rd ed.). New York: Oxford University Press.
- Mauskopf, J., Rutten, F., & Schonfeld, W. (2003). Cost-effectiveness league tables: valuable guidance for decision makers? *Pharmacoeconomics*, 21(14), 991-1000.
- Fenwick, E., O'Brien, B. J., & Briggs, A. (2004). Cost-effectiveness acceptability curves - facts, fallacies and frequently asked questions. *Health Economics*, 13, 405-415.
- Briggs, A., Sculpher, M., & Claxton, K. (2006). *Decision Modelling for Health Economic Evaluation*. New York: Oxford University Press.
- Briggs, A., & Fenn, P. (1998). Confidence intervals or surfaces? Uncertainty on the cost-effectiveness plane. *Health Economics*, 7(8), 723-740. doi: 10.1002/(sici)1099-1050(199812)7:8:3.0.co;2-o
- Briggs, A. H. (2004). Statistical approaches to handling uncertainty in health economic evaluation. *Eur J Gastroenterol Hepatol*, 16(6), 551-561.
- Briggs, A., Sculpher, M., & Claxton, K. (2006). *Decision Modelling for Health Economic Evaluation*. New York: Oxford University Press.
- Briggs, A., & Fenn, P. (1998). Confidence intervals or surfaces? Uncertainty on the cost-effectiveness plane. *Health Economics*, 7(8), 723-740. doi: 10.1002/(sici)1099-1050(199812)7:8:3.0.co;2-o
- Briggs, A. H. (2004). Statistical approaches to handling uncertainty in health economic evaluation. *Eur J Gastroenterol Hepatol*, 16(6), 551-561
- Hunchangsith, P., Barendregt, J. J., Vos, T., & Bertram, M. (2012). Cost-Effectiveness of Various Tuberculosis Control Strategies in Thailand. *Value in Health*, 15(1, Supplement), S50-S55. doi: 10.1016/j.jval.2011.11.006
- Drummond, M. F., Sculpher, M. J., Torrance, G. W., O'Brien, B. J., & Stoddart, G. L. (2005). *Methods for the Economic Evaluation of Health Care Programmes* (3rd ed.). New York: Oxford University Press.
- Drummond, M. F., Sculpher, M. J., Torrance, G. W., O'Brien, B. J., & Stoddart, G. L. (2005). *Methods for the Economic Evaluation of Health Care Programmes* (3rd ed.). New York: Oxford University Press.
- Briggs, A., Sculpher, M., & Claxton, K. (2006). *Decision Modelling for Health Economic Evaluation*. New York: Oxford University Press.