

Course Syllabus

[Jump to Today](#)

 [Edit](#)

Course Code: HON 211G

Course Title: Introduction to Statistics for Midwives

Credits: 3.0

Course Description: This course provides midwifery students with the basic statistical skills needed to interpret scientific studies. Students will learn the fundamentals of the scientific method and implementation of research studies, an overview of commonly applied statistical methods used in health research, practice analyzing actual birth-related studies and exposure to basic calculation of descriptive statistics. Students also look at ethical and political issues around how statistics are gathered and calculated, the process involved in the creation of clinical studies and how results from these are applied to maternity care.

Learning Objectives

[Learning objectives](#) are identified through the linking of MEAC Essential Competencies and the NCM Degree Qualification Profile.

Learning Activities

Read, listen to, watch assigned lesson materials.

Submit a written summary of current research.

Complete oral and/or written formative didactic assessments with final summative submission.

Identify and cite high-quality sources.

Use articulated reasoning while participating in an oral presentation, facilitated discussions and skills demonstrations.

Analyze a case study.

Explain trends, relationships, and/or change.

Optional: Develop a study aid.

Complete a final exam.

Note: The clinical requirement of NARM /Clinical Skills is completed at any time throughout the ASM apprenticeship during actual clinical practice and is NOT a requirement to complete this academic course. Typical clinical manifestations of knowledge learned in this course are identified in the learning objective document above.

Learning Materials / Resources:

[OpenStax Introductory Statistics \(https://openstax.org/books/introductory-statistics/pages/1-introduction\)](https://openstax.org/books/introductory-statistics/pages/1-introduction)

All other resources that are specific to course assignments are contained within the course modules.

Other recommended reading:

2. **[Bland, Martin. An Introduction to Medical Statistics, 4rd edition. Oxford: Oxford University Press. 2015. \(http://www.worldcat.org/title/introduction-to-medical-statistics/oclc/961899767?ht=edition&referer=br\)](http://www.worldcat.org/title/introduction-to-medical-statistics/oclc/961899767?ht=edition&referer=br)**

5. **[Fowler, J., P. Jarvis and M. Chevannes. Practical Statistics for Nursing and Health Care. NY: John Wiley and Sons, Ltd. 2013. \(http://www.worldcat.org/title/practical-statistics-for-nursing-and-health-care/oclc/966299748/editions?editionsView=true&referer=br\)](http://www.worldcat.org/title/practical-statistics-for-nursing-and-health-care/oclc/966299748/editions?editionsView=true&referer=br)**

6. **[Gaskin, Ina May. Ina May's Guide to Childbirth. NY: Bantam Books. 2012. \(http://www.worldcat.org/title/ina-mays-guide-to-childbirth/oclc/826306709?referer=br&ht=edition\)](http://www.worldcat.org/title/ina-mays-guide-to-childbirth/oclc/826306709?referer=br&ht=edition)** Pp. 211-214. "The Prostaglandins."

7. **[Zeiger, Mimi. Essentials of Writing Biomedical Research Papers. NY: McGrawHill. 2000. \(http://www.worldcat.org/title/essentials-of-writing-biomedical-research-papers/oclc/699159115/editions?editionsView=true&referer=br\)](http://www.worldcat.org/title/essentials-of-writing-biomedical-research-papers/oclc/699159115/editions?editionsView=true&referer=br)**

Web resources

8. Midwives Alliance of North America Division of Research
<http://www.mana.org/statform.html>

9. MANA statistics Project Homepage: <https://www.manastats.org>

10. National Centers for Health Statistics 2002 report:
http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_05.pdf

11. **[MEAC Abbreviated NARM Skills Form \(Links to an external site.\) \(http://www.midwiferycollege.org/AcademicProgram/Downloads/ASM/Clinical/Form-NARMSkills.pdf\)](http://www.midwiferycollege.org/AcademicProgram/Downloads/ASM/Clinical/Form-NARMSkills.pdf)**

12. **[MEAC Core Competencies for Midwives \(Links to an external site.\) \(http://meacschools.org/wp-content/uploads/2014/12/Curriculum-Checklist-of-Essential-Competencies-rev-2014.pdf\)](http://meacschools.org/wp-content/uploads/2014/12/Curriculum-Checklist-of-Essential-Competencies-rev-2014.pdf)**

13. **[Midwives Model of Care® \(Links to an external site.\) \(http://cfmidwifery.org/mmoc/define.aspx\)](http://cfmidwifery.org/mmoc/define.aspx)**.

14. *Help Evaluating Articles (visit the digital library)*

15. *Citation Guidance (visit the digital library)*

16. *Places to Find Research Articles (visit the digital library)*

Course Bibliography of Recommended Readings:

1. Albers, L., and P. A. Murphy. Evaluation of Research Studies. Part III: Statistical Significance Testing. *Journal of Nurse-Midwifery* 38: 51-53. (course packet)
2. Bland, Martin. *An Introduction to Medical Statistics*, 3rd edition. Oxford: Oxford University Press.
3. Cheyney, Melissa. Practice Laboratory. Part I: Fundamentals of the Scientific Method and the Implementation of Research Agendas. Course Packet for Introduction to Statistics for Midwives. National College of Midwifery. Taos, New Mexico.
4. Part IV: Some Notes on Spreadsheet Use, Commonly Cited Maternal and Infant Health Variables, and the Calculation of Descriptive Statistics. Course Packet for Introduction to Statistics for Midwives. National College of Midwifery. Taos, New Mexico.
5. Fowler, J., P. Jarvis and M. Chevannes. *Practical Statistics for Nursing and Health Care*. NY: John Wiley and Sons, Ltd.
6. Gaskin, Ina May. *Ina May's Guide to Childbirth*. NY: Bantam Books. Pp. 211-214. "The Prostaglandins."
7. Goldberg, A. and D. Wing. Induction of Labor: The Misoprostol Controversy. *Journal of Midwifery and Women's Health* 48(4):244-248. (course packet)
8. Janssen, P. et al. Outcomes of planned home births versus planned hospital births after regulation of midwifery in British Columbia. *Canadian Journal of Midwifery* 166(3):315-323. (course packet)
9. Mehl-Madrona, L. and M. Madrona. Physician and midwife-attended home births: Effects of breech, twin and post-dates outcome data on mortality rates. *Journal of Nurse-Midwifery* 42(2):91-98. (course packet)
10. Murphy, P. A. and L. Albers. Evaluation of Research Studies. Part I: Randomized Trials. *Journal of Nurse-Midwifery* 37:287-290. (course packet)
11. Murphy, P. A. and L. Albers. Evaluation of Research Studies. Part II: Observational Studies. *Journal of Nurse-Midwifery* 37:411-413. (course packet)
12. Pang, J. et al. Outcomes of Planned Home Births in Washington State: 1989-1996. *Obstetrics and Gynecology* 100(2):253-259. (course packet)
13. Zeiger, Mimi. *Essentials of Writing Biomedical Research Papers*. NY: McGraw-Hill. Web Resources:
14. Flint, C. and P. Poulengeris. The 'Know Your Midwife' Report. London: Caroline Flint. Available at: http://www.birthcentre.com/essays/the_know_your_midwife_scheme_2.htm (course packet)
15. Midwives Alliance of North America Statistics Form: <http://www.mana.org/statform.html> (course packet)

16. National Centers for Health Statistics 2002 report:

http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_05.pdf

17. Oregon Vital Statistics Website Definitions Page:

<http://www.oregonlaws.org/ors/2007/432.005>

18. Prenatal Testing Guide: <http://www.babycenter.com/prenatal-tests>

19. Scientific Method: http://teacher.nsr.l.rochester.edu/phy_labs/AppendixE/AppendixE.html (course packet)

20. http://physics.ucr.edu/~wudka/Physics7/Notes_www/node5.html

21. http://home.xnet.com/~blatura/skep_1.html (This link no longer exists, but students may look up resources for skeptics of scientific method)

Evaluation Tools / Methods:

The minimum passing grade for all courses is a cumulative 70% / C-. Grades are not recorded until both the student and preceptor submit end of trimester evaluations and in the case of general education courses supervision is completed

All assignments for this course are evaluated using the following criteria:

1. Responses to each didactic assessment are evaluated utilizing the NCM rubrics and degree level profile.
2. Answers should reflect a thorough review of the current literature regarding best current practices in midwifery care.
3. Non-plagiarized paraphrased answers from text which demonstrate appropriate comprehension of the learning objective. (Formative Assessment) *Students and Online Learning Coordinators work together until the student masters the information. (Summative Assessment)*
4. Group sharing within NCM is acceptable and encouraged. Students are allowed to use each other's answers by indicated "Group Share" and submission of the answer on all group identified assignments.
5. NCM's [Integrity Code \(https://docs.google.com/document/d/14PvgjDU4MJEKRZZiUQRFhNBEDL_KFqZzATPkDvuQYzA/edit?usp=sharing\)](https://docs.google.com/document/d/14PvgjDU4MJEKRZZiUQRFhNBEDL_KFqZzATPkDvuQYzA/edit?usp=sharing) is the basis for a "completed" score earned on all assignments which are allowed to be completed in community with the student's active preceptor(s).
6. Random evaluation of cited sources and page numbers for each written assignment.

Course credit: One Academic credit equals approximately 15 hours of formal time plus 30 hours of additional study or homework. Formal time is defined as the amount of time taken to answer the Learning Objectives to the level of 80% for midwifery courses and 70% for general education courses and to complete any learning activities to the preceptor's satisfaction, including any time spent face to