Course Title: Intrapartum Complications
Credits: 1.0

Course Description: This course introduces the topics of the prevention, identification, and proper response for complications during the intrapartum period. These complications including: preterm labor, preterm rupture of membranes, cord prolapse, fetal heart tone problems, dysfunctional labor patterns and cephalo-pelvic disproportion, maternal exhaustion, uterine rupture, placental abruption, malpresentations, shoulder dystocia and others. This course uses current research in midwifery and obstetrics to broaden the student’s understanding of the following NARM skills and MANA core competencies learned under clinical supervision:

NARM Skills

I. Midwifery Counseling, Education and Communication
(1)-I A. Provides interactive support and counseling and/or referral services to the mother regarding her relationships with her significant others and other healthcare providers
(2)-I B. Provides education, support, counseling and/or referral for the possibility of less-than-optimal pregnancy outcomes
(3)-I C. Provides education and counseling based on maternal health/reproductive/family history and on-going risk assessment
(4)-I D. Facilitates the mother’s decision of where to give birth
(5)-I E. Educates the mother and her family/support unit to share responsibility for optimal pregnancy outcome
(7)-I G. Applies the principles of informed consent
(8)-I H. Provides individualized care
(9)-I I. Advocates for the mother during pregnancy, birth and postpartum

II. General Healthcare Skills
(23)-II C. Demonstrates the application of aseptic technique
II D. Demonstrates the use of instruments and equipment including:
(30)-II D 7. Doppler and/or Fetoscope
(31)-II D 8. Gestation calculation wheel/calendar
(40)-II D 17. Speculum
(41)-II D 18. Stethoscope
(44)-II D 21. Thermometer
(45)-II D 22. Urinalysis strips
(46)-II D 23. Urinary catheter
(50)-II F. Uses alternate healthcare practices (non-allopathic treatments) and modalities
(51)-II G. Refers to alternate healthcare practitioners for non-allopathic treatments
II H. Treats for shock by:
(52)-II H 1. Recognizing the signs and symptoms of shock, or impending shock
(53)-II H 2. Assessing the cause of shock and providing treatment for shock
(54)-II I. Administers Oxygen
II K. Administers the following pharmacological (prescriptive) agents:
(57)-II K 2. Medical oxygen
(63)-II M. Uses Doppler

III. Maternal Health Assessment
(65)-III A. Obtains and maintains records of health, reproductive and family medical history
(91)-III L 12. Managing premature rupture of the membranes in a full-term pregnancy and/or consulting and referring appropriately:

**IV. Labor, Birth and Immediate Postpartum**

(94)-IV B. Evaluates and supports a laboring mother during the first stage of labor by assessing a variety of factors
(95)-IV C. Knows a variety of treatments for anterior/swollen lip
(96)-IV D. Demonstrates the ability to evaluate and support a laboring mother during the second stage of labor
IV E. Demonstrates the ability to recognize and respond to labor and birth complications such as:
(97)-IV E 1. Abnormal fetal heart tones and patterns
(98)-IV E 2. Cord prolapse
IV E 3. Variations in presentation such as:
(99)-IV E 3 a) Breech presentation
(100)-IV E 3 b) Nuchal hand, arm presentation
(101)-IV E 3 c) Nuchal cord presentation
(102)-IV E 3 d) Face and brow presentation
(103)-IV E 3 e) Multiple birth presentation and delivery
(104)-IV E 3 f) Shoulder dystocia
(105)-IV E 4. Management of meconium stained fluids
(106)-IV E 5. Management of maternal exhaustion

**Learning Activities:**

A. Student reads appropriate sections from the Learning Materials/Resources.

B. Student answers the questions listed in the Learning Objectives by researching the Learning Materials/Resources for the course and correctly cites the sources and page numbers for each of their answers.

C. Student presents answers the questions listed in the Learning Objectives for review by preceptor.

D. Student participates in preceptor elaboration/discussion of Learning Objectives.

E. In the case that the required texts are more than 5 years old, the student must research, prepare & present a summary of current best midwifery care/practices appropriate to a topic covered in this course from a current journal article/study, less than 5 years old.

F. Recommended Role-playing and/or Clinical Interactions

*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.*

Activities specific to NARM skills learned in this section:
1. Role play with your instructor or another student the diagnosis and emergency treatment of various types of cord prolapse.

2. Role play with your instructor or another student the diagnosis and treatment of shoulder dystocia using a pelvic model and a doll. Write a pneumonic memorization tool to memorize the steps/hand maneuvers for this emergency.

3. Role play with your instructor or another student the diagnosis and management of a breech delivery using a pelvic model and a doll.

4. Role play with your instructor or another student the management of meconium staining in second stage.

5. Role play with your instructor or another student the management of premature rupture of membranes, both before and after 37 weeks.

6. Role play with your instructor or another student the diagnosis and management of placental abruption in labor.

7. Role play with your instructor or another student the diagnosis and management of uterine abruption in labor.

8. Role play with your instructor or another student how you would assess signs and symptoms of preterm labor, both over the phone and in your clinic, and what you would do if you suspect it.

9. Role play with your instructor or another student how you would do hand maneuvers for the delivery of a baby in face presentation and in brow presentation.

**Learning Materials / Resources:**
*Please use textbooks less than 5 years old or most recent edition.*


**Resources for all Courses:**

MEAC Abbreviated NARM Skills Form:

MEAC Essential Competencies:

Midwives Model of Care®: http://cfmidwifery.org/mmoc/brochures.aspx

Students must find 1 article/study less than 5 years old. Recommended internet links as needed for latest developments in midwifery care:
https://www.midwiferycollege.edu/resources-national-college-of-midw

**Evaluation Tools / Methods:**

*Minimum passing grade for each course is a cumulative 80% / B-. Students and preceptors are encouraged to work together until the student masters the information.*

Final grade for the course is based on preceptor evaluation of the following:

A. Learning Objectives count for 50% of the final grade. The preceptor evaluates each answer based on three elements:

1. Answers should reflect a thorough review of current literature regarding best current practices in midwifery care.
2. Each answer should be formed in the student’s own words or paraphrased from the text. The answer should be minimal, not a re-write of the entire text, but enough to show appropriate comprehension of the learning objective.
3. Student identification of sources and page numbers for each of the Learning Objectives. (Preceptor should do a random check to determine that sources cited are correctly identified.)

B. Enrichment Activities, including research essays and summaries of articles: 20%
C. Discussions: 15%
D. Tests and Exams: 15%

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% and to complete any learning activities to the preceptor's satisfaction, including any time spent face to face with the preceptor. Informal time includes any time spent actively reading relevant sources and textbook/s, researching Learning Objectives, and studying for examinations.

Learning Objectives:

A. The student must research, prepare & present a summary of an aspect of current best midwifery care/practices appropriate a topic from this course from a current journal article/study.

B. Student answers the questions below and cites the sources and page numbers.

1. Discuss the rationale behind recognizing complications as early as possible.

2. Explain why and how the midwife continues to contribute to patient care after referring her for a complication.

3. Name four evaluations a midwife must make about a given intervention before carrying it out.

4. Cite the statistical risk of uterine rupture for women with previous low transverse uterine incisions and for women with previous classical or inverted-T or low vertical incisions.

5. Explain why the rupture of a low transverse uterine incision usually is not catastrophic.

6. Explain how the diagnosis of CPD in the previous birth affects the VBAC candidate's ability to give birth normally this time and how the midwife adjusts her counseling.

7. Discuss the agreed upon standards for managing VBAC labors. Explain which elements of care are not yet agreed upon. Discuss what differences in monitoring VBAC births are recommended.

8. Explain the increased incidence of placenta accreta and discuss the recommended management.

9. Describe the management for scar dehiscence following VBAC and discuss the rationale.

10. Define preterm labor. Explain why it is a leading cause of perinatal mortality and morbidity.

11. If the mother has had previous premature births, discuss why she is felt to be at increased risk for subsequent premature births. Explain the importance of obtaining records of previous premature or low birth weight births.

12. List at least 5 predisposing factors to prematurity and explain why these lead to
prematurity.

13. Describe 5 management strategies for preventing prematurity and low birth weight and explain how they relate to predisposing factors.

14. Describe the additional management strategies for a woman with a history of two or more prematurities or multiple gestations and who has no signs or symptoms of preterm labor.

15. Discuss the management for a woman with preterm labor. Give your rationale for each.

16. Discuss the instructions given to a woman managed for preterm labor who is sent home.

17. Discuss what questions are considered in the decision to use tocolysis and discuss the concerns for mother and baby.

18. Name some predisposing factors for premature rupture of membranes and discuss the risks to mother and baby.

19. Explain how the practitioner's management of PROM can minimize these risks.

20. Discuss the management options for PROM and their rationales.

21. Describe the differences in outcome for PROM before and after 37 weeks.

22. Explain the difference between chorioamnionitis and amnionitis. Discuss their similarities and how they can affect both mother and baby.

23. List at least five signs and symptoms of amnionitis and chorioamnionitis.

24. Describe the steps in management of a woman with amnionitis or chorioamnionitis and give the rationale for each.

25. Describe the standard resolution for umbilical cord prolapse and give the rationale.

26. Discuss the two types of umbilical cord prolapse; describe how they are different and the management for each.

27. Describe 5 precipitating causes of cord prolapse and explain how each causes prolapse.

28. Describe the steps for management of prolapsed cord and give the rationale for each.

29. Describe the fetal heart tone deceleration patterns and explain why they are abnormal.

30. Describe the management plan for late declarations and give the rationale for each step.
31. List the causes of acute utero-placental insufficiency and explain why these adversely affect the fetus.

32. Describe the causes of variable decelerations and what actions should be taken in the presence of variable decelerations.

33. Describe acceleration patterns and include the significance of each.

34. Describe a sinusoidal pattern and its significance.

35. Define fetal distress and the differences between chronic and acute distress.

36. Describe the steps for management of fetal distress in second stage and give the rationale for each.

37. Discuss the management of meconium staining during 1st stage. Include a description of the various degrees of meconium staining that can occur.

38. Describe the differences in management in the 2nd stage of labor in the presence or absence of meconium. Discuss other factors that must be taken into account and why.

39. Define CPD. Explain how this determination is made. Discuss the only true test for CPD and explain why this is so.

40. Describe the steps for assessing an arrested labor and give the rationale for each.

41. List the 5 most serious complications of CPD and explain how these occur.

42. List the signs and symptoms of deep transverse arrest and the contributing factors to each.

43. Discuss the management techniques used to avoid deep transverse arrest and give the rationales for each.

44. List the signs and symptoms of hypotonic uterine dysfunction and the causes of each.

45. Describe management options in the presence of hypotonic uterine dysfunction.

46. Name the signs and symptoms of hypertonic uterine dysfunction and the risks associated with it.

47. Explain how hypertonic uterine dysfunction is managed and why.

48. Describe maternal exhaustion and how this contributes to risk for mother and baby.

49. Describe the signs and symptoms of maternal exhaustion and the significance of these.
50. Describe the management of maternal distress/exhaustion and give the rationale.

51. Name the signs and symptoms of placental abruption.

52. Discuss the management of a placental abruption during labor.

53. Name the possible causes of uterine rupture and why.

54. Explain why signs and symptoms of uterine rupture can be either very dramatic or subtle.

55. Discuss the management steps for uterine rupture and the rationale for each.

56. Cite the incidence and causes of shoulder dystocia. Discuss the conditions that predispose to shoulder dystocia and why.

57. Discuss the steps for management of shoulder dystocia and their expected effects.

58. Discuss what additional emergencies you should expect to manage when there is shoulder dystocia and describe their etiology.

59. Describe the mechanisms of face presentation in detail and explain why face presentations cannot deliver in the mentum posterior position.

60. Describe the steps for the management of face presentation and the rationale for each.

61. Discuss the various types of breech presentation and the degree of risk each carries for vaginal birth.

62. Describe the mechanisms of labor for a frank breech presentation in detail.

63. Describe the hand maneuvers for delivering a breech presentation in detail.

64. Discuss the management of a nuchal hand/arm presentation. How can this presentation adversely affect a labor pattern?

65. Discuss the signs/symptoms of a short or restricted cord.

66. Discuss the management strategies when a short/restricted cord is suspected during labor.

67. Discuss the management of cervical swelling during labor.

68. Discuss the possible problems associated with multiple birth and why.

69. Describe the cardinal points for the delivery of twins and give the rationale for each.