

**DIRECT ENTRY MIDWIFERY
LEGEND DRUGS
AND DEVICES**

INITIAL EDUCATION

**Oregon Health Licensing Agency
Board of Direct Entry Midwifery
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**LEGEND DRUGS AND DEVICES
INITIAL EDUCATION
40 hours**

The **Initial Legend Drugs and Devices Education** Program shall consist of 40 total hours of instruction in the following: 8 hours - Pharmacology; 4 hours - Administration of medications through injection; 4 hours - Treatment of shock; 10 hours – I.V. Therapy; 4 hours - Neonatal resuscitation specific to out of hospital birth and 10 hours– Suturing. See core curriculum for learning objectives and other details.

Course / Description	Hours Required
PHARMACOLOGY:	8 hours
ADMINISTRATION OF MEDICATIONS THROUGH INJECTION:	4 hours
TREATMENT OF SHOCK:	4 hours
I.V. THERAPY:	10 hours
NEONATAL RESUSCITATION:	4 hours
SUTURING:	10 hours
TOTAL HOURS:	40 HOURS

In the course of study the candidate shall receive theory instruction, classroom instructor demonstrations and/or guided practical experience under the supervision of the authorized provider. The amounts of time a candidate devotes to theory and practice are flexible provided the minimum hour requirements listed above are met.

In addition to the forty hours of instruction, the course must include assessment of theory and skills.

CORE CURRICULUM FOR PHARMACOLOGY – 1 of 2

Objectives	Dosage Guidelines	Standards for Instructors	Resources
<ul style="list-style-type: none"> ◆ Define a drug ◆ Define "legend drugs and devices" <i>Explain OAR's concerning legend drugs and devices</i>-Define and explain the following <ul style="list-style-type: none"> ◆ Action and effect ◆ Adverse reactions ◆ Agonists and antagonists ◆ Tolerance ◆ Interactions ◆ Placebo effects ◆ Compliance ◆ Discuss various routes of administration ◆ Explain placental transfer of medication to the fetus ◆ Explain how a drug moves through the body <ul style="list-style-type: none"> ◆ Absorption rate ◆ Metabolism ◆ Excretion ◆ For each of the legend drugs and devices authorized for use by LDMs, explain and discuss the following (see text for specifics) <ul style="list-style-type: none"> ◆ Mechanism of pharmacological action ◆ Indications ◆ Therapeutic effects ◆ Side effects/adverse reactions ◆ Contraindications ◆ Incompatibilities/drug interactions ◆ Administration including <ul style="list-style-type: none"> ◆ Dosage ◆ Dosage form and packaging ◆ Onset of action ◆ Peak effect ◆ Duration of action/half-life 	<ul style="list-style-type: none"> ◆ <u>Synthetic Oxytocin (Pitocin, Syntocin & Generic)</u> IM: 10U (1ml), may repeat at 2 hour intervals as necessary to maintain uterine tone. IV: 10U (1ml) bolus, may add 10-20U (1-2ml) to 1000 ml IV fluid and infuse at rate necessary to maintain uterine tone ◆ <u>Methylergonovine (Methergine)</u> IM: 0.2 mg (1 ml) repeat if necessary at 2 to 4 hour intervals Oral: 0.2 - 0.4 mg (1 to 2 tablets) every 6 to 12 hours for up to 2 to 7 days ◆ <u>Ergonovine (Ergotrate)</u> Oral: 0.2 - 0.4 mg (1 to 2 tablets) every 6 to 12 hours for up to 2 to 7 days ◆ <u>Misoprostol (Cytotec)</u> 600 mcg (micrograms) orally or rectally for management of postpartum hemorrhage only ◆ <u>Epinephrine (Adrenalin, EpiPen, and generic)</u> SQ: 0.2 mg - 0.3 mg of 1:1000 solution (0.2 ml to 0.3 ml) for rescue from anaphylactic reaction ◆ <u>Vitamin K1 (Phytonadione)(injectable, generic; oral: Mephyton or generic;</u> IM: .5 to 1.0 mg at birth: Oral: 1.25 mg to 2.5 mg (1/2 tablet crushed) at birth, repeating dose at one week, and at 2-4 weeks. ◆ Menadione (vitamin K3) may <u>NOT</u> be used ◆ <u>Erythromycin Ophthalmic Ointment 0.5% (Ilotycin,</u> 	<ul style="list-style-type: none"> ◆ <i>Licensed Pharmacist (not limited to Oregon Licensure)</i> ◆ Licensed Midwife ◆ Licensed RN ◆ Licensed Physician - MD, DO, ND ◆ Physician Assistant 	<ul style="list-style-type: none"> ◆ Current Edition of the following: <ul style="list-style-type: none"> ◆ Pharmacology for Midwives by Jane Poznar, RPh ◆ Physicians Desk Reference - 55th Edition by Mukesh Mehta ◆ Drug Topics; Facts and Comparisons by Editorial Board

CORE CURRICULUM FOR PHARMACOLOGY CONTINUED – 2 of 2

Objectives	Dosage Guidelines	Standards for Instructors	Resources
<ul style="list-style-type: none"> ◆ Storage, transport and security ◆ Disposal ◆ Chart the use of authorized legend drugs and devices ◆ Devise system for tracking legend drugs in a home-based midwifery practice, including expiration dates, per OAR <p>Explain use of <i>drug references</i></p>	<ul style="list-style-type: none"> ◆ <u><i>AK-Mycin and generics</i></u> Topically: 1.0 cm (<i>1/2 inch</i>) ribbon in each lower conjunctiva ◆ <u><i>Lidocaine (Xylocaine and generic) and Procaine (Novocaine and generic)</i></u> <i>Tissue injection or gel for local anesthesia using the smallest dosage that will produce desired effects</i> ◆ <u><i>Topical Anesthetic Spray (i.e. Cetacaine)</i></u> <i>Spray directly to area to be anesthetized. Do not exceed 2-second spray duration</i> ◆ <u><i>Topical Anesthetic Gel (i.e. benzocaine)</i></u> ◆ <u><i>Rh Immune Globulin (RhoGAM, Gamulin Rh, BayRho-D, and others)</i></u> <i>IM: 50 mcg(micrograms) prophylactically at 28 weeks or after miscarriage up to 12 weeks</i> <i>IM: 300 mcg (micrograms) postpartum or after miscarriage beyond 13 weeks.</i> ◆ <u><i>Sterile Water Papules</i></u> <i>Intradermal use as a local anesthetic</i> ◆ <u><i>Oxygen</i></u> For resuscitation 		

CORE CURRICULUM FOR ADMINISTRATION OF MEDICATIONS THROUGH INJECTION

1 of 2

Objectives	Dosage Guidelines	Standards for Instructors	Resources
<ul style="list-style-type: none"> ◆ Describe and utilize universal precautions when administering medications, including <ul style="list-style-type: none"> ◆ Gloving ◆ Discuss latex allergies including <ul style="list-style-type: none"> ◆ What is latex ◆ How use of powder is involved in allergies ◆ Risk factors and risk groups ◆ Types of allergic reactions with signs and symptoms ◆ Diagnosis ◆ Treatment ◆ Steps for reducing latex allergy ◆ Eye protection ◆ Safety equipment ◆ Appropriate disposal of sharps ◆ List equipment needed for medication administration <ul style="list-style-type: none"> ◆ Needles - size(length and bore) ◆ Filter Needles (for use with glass ampules) ◆ Syringes - sizes, "luer" locks ◆ Skin surface disinfectants - alcohol, povidone iodine ◆ Medication containers <ul style="list-style-type: none"> ◆ Glass ampules ◆ Multidose container ◆ Single use vials ◆ Differentiate intradermal, subcutaneous, intramuscular and I.V. medication administration sites ◆ Differentiate between I.M. injection technique and dose for newborn and adult ◆ List appropriate sites for medication injection ◆ Explain the "three point check" technique and when to perform. <ol style="list-style-type: none"> 1. Date on medication (not expired), type, dosage 2. Repeat after drawing up medication 3. Repeat after administering medication and chart ◆ List steps for administering drug IM 	<p style="text-align: center;">See Pharmacology Curriculum</p>	<ul style="list-style-type: none"> ◆ Licensed Midwife ◆ Licensed RN ◆ Licensed Physician - MD, DO, ND ◆ Certified Paramedic ◆ Physician Assistant 	<p>Current Editions of the following:</p> <ul style="list-style-type: none"> ◆ Pocket Guide to Basic Skills and Procedures Anne Griffin Perry and Patricia A. Potter, 1998 ◆ Training Curriculum - OSHA Bloodborne Pathogens, KH West, 1992

CORE CURRICULUM FOR ADMINISTRATION OF MEDICATIONS THROUGH INJECTION CONTINUED – 2 of 2

<ul style="list-style-type: none"> ◆ List steps for administering drug SQ ◆ Explain appropriate care of equipment used in administering medications. ◆ Demonstrate use of filter needle with glass ampule ◆ Demonstrate use of multidose vial ◆ Demonstrate I.M. injection ◆ Demonstrate subcutaneous injection ◆ Demonstrate administration of sterile water papules <p>Demonstrations do not have to be on live models</p>			
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CORE CURRICULUM FOR TREATMENT OF SHOCK – 1 of 1

Objectives	Dosage Guidelines	Standards for Instructors	Resources
<ul style="list-style-type: none"> ◆ Define Shock ◆ Identify pathophysiology of shock ◆ List and explain four cellular phases of shock ◆ List four types of shock ◆ Explain three stages of shock ◆ List signs and symptoms of shock ◆ Describe how to assess a patient in shock <ul style="list-style-type: none"> ◆ Define "primary survey" and list its three components ◆ Define "secondary survey" and list its two components ◆ List locations of palpating a pulse ◆ List three levels of care in the resuscitation of a patient in shock ◆ Demonstrate special positioning needs when treating pregnant women for shock and explain rationale and physiology ◆ Reasons for using I.V. therapy including treatment of shock, dehydration, clinical exhaustion, hyperemesis. 	<ul style="list-style-type: none"> ◆ IV Fluid Types <ul style="list-style-type: none"> ◆ 0.9% Saline Solution ◆ Lactated Ringers Solution ◆ D5LR ◆ D5W ◆ Oxygen 	<ul style="list-style-type: none"> ◆ Licensed Midwife ◆ Licensed RN ◆ Licensed Physician - MD, DO, ND ◆ Certified Paramedic ◆ Physician Assistant 	<ul style="list-style-type: none"> ◆ Practical Skills Guide for Midwifery – current edition, Pam Weaver and Sharon K. Evans, 2001 ◆ Advanced Emergency Care by Shirley Jones, Al Weigel, Roger White, Norman McSwain and Marty Breiter. Published by Lippincott Williams and Wilkins. ◆ Holistic Midwifery II: Care During Labor and Birth by Anne Frye – current edition

CORE CURRICULUM FOR I.V. THERAPY – 1 of 1

Objectives	Dosage Guidelines	Standards for Instructors	Resources
<ul style="list-style-type: none"> ◆ Reasons for using I.V. therapy including treatment of shock, dehydration, clinical exhaustion, hyperemesis. ◆ List necessary equipment and supplies for administration of I.V. fluids ◆ Explain appropriate care of equipment and supplies used in I.V. administration ◆ List and explain appropriate use of I.V. solutions approved in OAR ◆ Explain and describe rectal administration of I.V. fluids ◆ Explain in detail the appropriate procedure for administration of I.V. fluids ◆ Explain the difference between isotonic, hypertonic, and hypotonic solutions ◆ Describe appropriate flow rates for I.V. administration ◆ List reasons why I.V. flow can be impeded ◆ Identify s/s of I.V. failure (infiltration) ◆ List dangers of inappropriately placed or maintained I.V. ◆ List risks associated with I.V. therapy ◆ Identify appropriate antihemorrhagic medication for use in an I.V. solution ◆ List three aspects of I.V. fluid to check before administration ◆ List actions the midwife can take to prevent infection when administering or changing an I.V. ◆ Demonstrate on live model non-invasive treatment including appropriate positioning for shock ◆ Demonstrate, on mannequin, appropriate steps for administering an I.V. ◆ Demonstrate how to change-out a bag of I.V. fluid ◆ Demonstrate, on live model, correct administration and discontinuation of four I.V.'s 	<ul style="list-style-type: none"> ◆ IV Fluid Types <ul style="list-style-type: none"> ◆ 0.9% Saline Solution ◆ Lactated Ringers Solution ◆ D5LR ◆ D5W 	<ul style="list-style-type: none"> ◆ Licensed Midwife ◆ Licensed RN ◆ Licensed Physician - MD, DO, ND ◆ Certified Paramedic ◆ Physician Assistant 	<p>Current Editions of the following:</p> <ul style="list-style-type: none"> ◆ Practical Skills Guide for Midwifery, Pam Weaver and Sharon K. Evans, ◆ Advanced Emergency Care by Shirley Jones, Al Weigel, Roger White, Norman McSwain and Marty Breiter. Published by Lippincott Williams and Wilkins. ◆ Holistic Midwifery II: Care During Labor and Birth by Anne Frye – current edition

CORE CURRICULUM FOR NEONATAL RESUSCITATION - 1 of 5

Objectives	Dosage Guidelines	Standards for Instructors	Sources
<ul style="list-style-type: none"> ◆ Explain O₂ concentrations from room air (21%), mouth to mouth (16%) and oxygen supply and source (50-100%) ◆ Discuss the relationship between oxygen concentration and heart pump efficiency (as CPR is 2/3 less efficient than a healthy beating heart, oxygen requirements increase) ◆ Explain the difference between oxygen cylinder types <ul style="list-style-type: none"> ◆ “D” (350 liter) vs. “E” (625 liter) ◆ Aluminum vs. stainless steel ◆ List safety precautions when working with oxygen, including use of cylinder stands ◆ Explain the role of the pressure regulator and the flow meter ◆ Discuss types of O₂ delivery devices and when they are used including <ul style="list-style-type: none"> ◆ Nasal cannula ◆ Non-rebreather mask ◆ Explain recommended flow rates for the different delivery devices, and the resulting percent of oxygen delivered. ◆ Explain types and care of Positive Pressure Ventilation (PPV) devices/ambu bags in resuscitation. ◆ Demonstrate use of PPV devices/ambu bags including <ul style="list-style-type: none"> ◆ Safety check ◆ Attaching tubing ◆ Attaching mask ◆ Demonstrate use of BVM (bag/valve/mask) in resuscitation ◆ List items to include on a neonatal resuscitation equipment tray ◆ Demonstrate preparation of newborn resuscitation tray ◆ Describe the anatomy and physiology of the human airway including alveoli circulation ◆ List the four steps of neonatal transition when cord is not cut: 	NONE	<ul style="list-style-type: none"> ◆ American Heart Association / American Academy of Pediatrics Neonatal Resuscitation Program Certified Instructor ◆ Instructor approved by the Board of Direct Entry Midwifery 	<p>Current Editions of the following:</p> <ul style="list-style-type: none"> ◆ Neonatal Resuscitation Textbook, American Heart Association and American Academy of Pediatrics,

CORE CURRICULUM FOR NEONATAL RESUSCITATION CONTINUED - 2 of 5

Objectives	Dosage Guidelines	Standards for Instructors	Sources
<ul style="list-style-type: none"> ◆ Blood into alveoli arterioles ◆ Draws fluid into alveoli ◆ Air into alveoli ◆ Ductus arteriosus close ◆ Explain how neonatal transition differs with immediate cord amputation versus delayed cord cutting ◆ Describe the normal stress response in fetus' and newborns, and its impact on transition ◆ Explain the pathophysiology of asphyxia, including primary and secondary (terminal) apnea ◆ Describe the physiology behind the technique of delayed cord clamping in the immediate post-partum ◆ Explain the benefits and risks of delayed cord clamping in neonatal resuscitation ◆ List two ways to administer free-flow oxygen (loose mask; cupped hand) ◆ List two places to check for heart rate on a newborn (umbilicus; directly over heart) ◆ Describe how to assess heart rate in a depressed newborn (6 sec x 10) ◆ List five clinical findings of a compromised newborn <ul style="list-style-type: none"> ◆ cyanosis due to insufficient oxygen in blood ◆ bradycardia due to insufficient oxygen delivery to the heart muscle or brain stem ◆ low blood pressure due to insufficient blood to the heart, to blood loss, or to insufficient blood return from the placenta before or during birth ◆ depression of respiratory drive due to insufficient oxygen delivery to the brain ◆ poor muscle tone due to insufficient oxygen delivery to brain and muscles ◆ List three criteria for a “vigorous” newborn <ul style="list-style-type: none"> ◆ strong respiratory efforts ◆ good muscle tone ◆ heart rate greater than 100 beats per minute ◆ List five appropriate ways to stimulate a newborn <ul style="list-style-type: none"> ◆ drying ◆ postural draining ◆ suctioning ◆ gently rub back, trunk, extremities ◆ rub/slap/flick soles of feet 			

CORE CURRICULUM FOR NEONATAL RESUSCITATION CONTINUED - 3 of 5

Objectives	Dosage Guidelines	Standards for Instructors	Sources
<ul style="list-style-type: none"> ◆ List inappropriate ways to stimulate a newborn and risks <ul style="list-style-type: none"> ◆ squeezing the rib cage – fractures, pneumothorax, RDS, death ◆ slapping the back – bruising ◆ forcing thighs on abdomen – rupture liver or spleen ◆ dilating anal sphincter – tear sphincter ◆ use hot or cold compresses – hyperthermia, hypothermia, burns ◆ shaking – brain damage ◆ Explain the “Resuscitation Flow Diagram” ◆ Assess and safety check equipment used for newborn resuscitation including <ul style="list-style-type: none"> ◆ self inflating PPV ◆ newborn sized masks ◆ resuscitation tray ◆ suction devices ◆ oxygen tank and regulator ◆ orogastric tube ◆ Explain the difference between a “flow-inflating” and “self-inflating” resuscitation bag ◆ Explain and demonstrate: <ul style="list-style-type: none"> ◆ Where to place newborn relative to mother ◆ What to use as a hard surface during resuscitation ◆ How to keep the newborn warm during resuscitation ◆ When to cut the cord during resuscitation ◆ Where on the cord to cut to create an optimal cord length ◆ How to position a newborn for resuscitation ◆ How to assess for breathing and normal circulation ◆ How to choose the correct mask size for the newborn requiring resuscitation ◆ How to position the mask correctly on a newborn ◆ When/how to administer free flow oxygen to a newborn using bag & mask ◆ How to “heat” oxygen when administering (through use of long tubing) ◆ Explain and demonstrate: <ul style="list-style-type: none"> ◆ What to do during the first 30 seconds after every birth (second listing, proper place) <ul style="list-style-type: none"> ◆ Assess for <ul style="list-style-type: none"> ◆ Pink color on trunk? ◆ Breathing or crying? ◆ Good muscle tone? ◆ Term gestation? ◆ Clear of meconium? 			

CORE CURRICULUM FOR NEONATAL RESUSCITATION CONTINUED – 4 of 5

Objectives	Dosage Guidelines	Standards for Instructors	Sources
<ul style="list-style-type: none"> ◆ If no to any, then <ul style="list-style-type: none"> ◆ provide warmth ◆ postural drainage ◆ dry baby ◆ stimulate baby gently ◆ talk to baby ◆ clear airway if needed ◆ blow-by oxygen if needed ◆ keep cord intact, baby lower than mother ◆ Explain and demonstrate: <ul style="list-style-type: none"> ◆ When to start rescue breathing for a newborn <ul style="list-style-type: none"> ◆ Chest color not pink ◆ Heart rate <100 bpm ◆ Lack of respirations or rr <30 ◆ How to open an airway ◆ How to suction using a <ul style="list-style-type: none"> ◆ Bulb syringe ◆ DeLee suction device ◆ Res-Q-Vac ◆ How to provide mouth-to-mouth and mouth-to-barrier ventilation ◆ How to provide “Inflation” breaths, including rate and depth of breaths ◆ Difference between “Inflation” and “Ventilation” breaths ◆ How to provide “Ventilation” breaths ◆ How to use a PPV device with and without oxygen hook-up ◆ How and when to use an orogastric tube ◆ List 4 signs that neonatal condition is improving: <ul style="list-style-type: none"> ◆ Increasing heart rate ◆ Improving color ◆ Spontaneous breathing ◆ Improving muscle tone ◆ How to assess when positive pressure ventilation can be discontinued ◆ Appropriate steps to newborn resuscitation (excluding compressions) using 30-6-30-6-30-6 timeframe ◆ Explain when to utilize chest compressions in neonatal resuscitation ◆ Explain and demonstrate: <ul style="list-style-type: none"> ◆ How to assess for heartbeat using cord pulse ◆ How to administer chest compressions ◆ How to coordinate chest compressions with positive-pressure ventilation ◆ When to stop chest compressions in order to assess 			

CORE CURRICULUM FOR NEONATAL RESUSCITATION CONTINUED – 5 of 5

Objectives	Dosage Guidelines	Standards for Instructors	Sources
<ul style="list-style-type: none"> ◆ How to monitor infant after cessation of chest compressions ◆ When to resume chest compressions and how long to continue ◆ When to call 911 ◆ Explain two options for finger position when administering chest compressions, with pros and cons <ul style="list-style-type: none"> ◆ thumb technique ◆ two-finger technique ◆ Demonstrate the two options for finger positioning when administering chest compressions ◆ List potential dangers associated with administering chest compressions <ul style="list-style-type: none"> ◆ damage heart ◆ puncture lung ◆ fracture rib ◆ laceration of liver by xiphoid process ◆ Discuss management of the newborn with meconium in the amniotic fluid <ul style="list-style-type: none"> ◆ if baby is not vigorous ◆ if baby is vigorous ◆ Explain why out of hospital midwives do not provide newborn endotracheal intubation ◆ Demonstrate appropriate steps to newborn resuscitation in sequence including chest compressions ◆ Discuss benefits of using room air instead of 100% oxygen in resuscitating a newborn ◆ Explain how long room air should be used in neonatal resuscitation before switching to 100% oxygen (no longer than 90 seconds of ventilation) ◆ Demonstrate use of PPV device/ambu bag without 100% oxygen ◆ Demonstrate full neonatal cardiopulmonary resuscitation technique on a mannequin ◆ Demonstrate full neonatal cardiopulmonary resuscitation technique on a mannequin in an exam setting ◆ Demonstrate knowledge of neonatal resuscitation through successful completion of a written exam on neonatal resuscitation. ◆ Describe the follow-up care in the first few hours following neonatal resuscitation of an infant whose Apgar score is less than seven at five minutes including assessing for hypoglycemia 			

CORE CURRICULUM FOR SUTURING – 1 of 1

Objectives	Dosage Guidelines	Standards for Instructors	Sources
<ul style="list-style-type: none"> ◆ Explain basic female pelvic floor and genital anatomy ◆ List methods for preventing perineal damage ◆ Define degrees of perineal damage ◆ Explain steps to evaluate pelvic floor and genital area for damage following birth. Identify circumstances when perineal damage may not require repair ◆ Discuss steps to take if a woman declines -repair ◆ List types of perineal damage which requires referral for repair ◆ Explain the consequences of a poorly done repair to a woman's health ◆ Discuss pros and cons of two forms of local anesthetic <ul style="list-style-type: none"> ◆ Amide vs. ester based ◆ Discuss use of epinephrine in local anesthetic – pros and cons ◆ Explain use of approved local anesthetics, including route of administration ◆ List equipment needed to effect repair of 1st degree, 2nd degree, 3rd degree and labial lacerations ◆ Explain differences between synthetic and organic suture ◆ Explain differences in needle size and cutting edge and most appropriate use of each <ul style="list-style-type: none"> ◆ Taper ◆ Cutting ◆ Taper-cutting ◆ Discuss which instruments are needed for perineal repair, including sizes and styles of needle holders, clamps, forceps and scissors ◆ Explain special techniques for working with curved needles ◆ Demonstrate correct use of needle holder to make an instrument tie ◆ Discuss pros and cons of instrument ties ◆ Demonstrate dual instrument suturing techniques and other practitioner safety techniques ◆ Discuss pros and cons of hand ties ◆ Demonstrate hand tie suturing techniques and other practitioner safety techniques ◆ Demonstrate four basic stitches <ul style="list-style-type: none"> ◆ Interrupted ◆ Basting ◆ Lock blanket ◆ Running mattress ◆ List steps for 1st degree repair ◆ List steps for 2nd degree repair ◆ List steps for 3rd degree repair ◆ List steps for labial repair ◆ Explain how to maintain aseptic technique while suturing ◆ Discuss appropriate disposal of repair waste, including sharps ◆ Discuss pros and cons of subcuticular closure in perineal repair 	<p>NONE</p>	<p><i>All instructors must have training relevant to course</i></p> <ul style="list-style-type: none"> ◆ Licensed Midwife ◆ Licensed Physician - MD, DO, ND ◆ Physician Assistant 	<p>Current Editions of the following:</p> <ul style="list-style-type: none"> ◆ Healing Passage: a Midwife's Guide to the Care and Repair of the Tissues Involved in Birth , Anne Frye ◆ Practical Skills Guide for Midwifery , Pam Weaver and Sharon K. Evans

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***INITIAL EDUCATION
EXAMINATION***

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Fax: (503) 370-9004
E-mail: hlo.info@state.or.us**

Requirements for Initial Legend Drugs and Devices Course Completion

Notification of the candidate's completion of each course component within the legend drugs and devices curriculum must be recorded in the "course completion" column of the original transcript.

To obtain course completion candidates must:

- ◆ Obtain a minimum score of 80 percent in each component of the written examination, and
- ◆ Successfully complete all required skill demonstrations.

The instructor has the option of using their own written examination covering all course components listed within the legend drugs and devices curriculum, or using the following examples.

Course Components	Initial Skill Demonstration
Administration of Medications through injections	Use of universal precautions
	Drawing up medication from: <ul style="list-style-type: none"> ◆ Glass ampules (use of filter needle) ◆ Multi-dose containers ◆ Single use vials
	Proper steps for administering medications: <ul style="list-style-type: none"> ◆ I/M ◆ Intradermal ◆ Subcutaneous
	Proper steps for administering sterile water papules:
I.V. Therapy	Use of universal precautions
	A minimum of four attempts, with a minimum of two successful, starts and discontinuations of I.V. Therapy.
Neonatal Resuscitation	American Heart Association or American Academy of Pediatrics Neonatal Resuscitation Program skills demonstration requirements to obtain certification including the addition of midwifery based skills covered in the initial legend drugs and devices curriculum
Suturing	Use of universal precautions
	Creating and maintaining a sterile field
	Demonstrate dual instrument suturing technique for a 2 nd degree tear.
	Demonstrate four basic stitches
	Demonstrate an instrument tie
	Demonstrate a hand tie

EXAMPLE GRADING FORMS

The following are intended as
guidelines for a
comprehensive written
examination

PHARMACOLOGY

100 possible points (%). Candidate must score a minimum of 80 points (%) to pass course.

Candidate Name: _____

Date: _____

Candidate Performance Standards	Points Possible	Points Awarded
<i>Defining a Drug</i>	5	
<i>Distinguishing "Legend Drugs and Devices" from Other Types</i>	5	
<i>Defining and Explanation of the Following:</i> <ul style="list-style-type: none"> ➤ Action and Effect ➤ Adverse Reactions ➤ Agonists and Antagonists ➤ Tolerance ➤ Interactions ➤ Placebo Effects ➤ Compliance 	5	
<i>Discussing Various Routes of Administration</i>	5	
<i>Explaining Placental Transfer of Medication to the Fetus</i>	5	
<i>Explaining How a Drug Moves Through the Body:</i> <ul style="list-style-type: none"> ➤ Absorption Rate ➤ Metabolism ➤ Excretion 	5	
<i>Explanation & Discussion of the following:</i> <ul style="list-style-type: none"> ➤ Mechanism of Pharmacological Action ➤ Indications ➤ Therapeutic Effects ➤ Side Effects / Adverse Reactions ➤ Contraindications ➤ Incompatibilities / Drug Interactions ➤ Administration Including <ul style="list-style-type: none"> ➤ Dosage ➤ Dosage Form & Packaging ➤ Onset of Action ➤ Peak Effect ➤ Duration of Action / Half-Life 	50	
<i>Storage and Security</i>	5	
<i>Charting the Use of Authorized Legend Drugs and Devices</i>	5	
<i>Devising a System for Tracking Legend Drugs and Devices in a Home-Based Midwifery Practice, Including Expiration Dates</i>	5	
<i>Demonstration of resource use - i.e. the Physicians Desk Reference & Sanford Guide to Anti-microbial Therapy</i>	5	
POINTS SCORED	100	
TOTAL PERCENT AWARDED	100%	

Instructors Initials: _____

ADMINISTRATION OF MEDICATIONS THROUGH INJECTION

100 possible points (%). Candidate must score a minimum of 80 points (%) to pass course.

Candidate Name: _____

Date: _____

Candidate Performance Standards	Points Possible	Points Awarded
<i>Describing & Using Universal Precautions when Administering Medications, including:</i> <ul style="list-style-type: none"> ➤ Gloving ➤ Eye Protection ➤ Safety Equipment ➤ Appropriate Disposal of Sharps 	30	
<i>Listing Administration Equipment, including:</i> <ul style="list-style-type: none"> ➤ Needles - size (length & bore) ➤ Filter Needles (use with glass ampules) ➤ Syringes - sizes, "leur" locks ➤ Skin Surface Disinfectants - alcohol, povidone iodine ➤ Medication Containers (glass ampules, multi-dose containers, single use vials, etc.) 	20	
<i>Differentiation of Medication Administration Sites (subcutaneous, intra-muscular and I.V.)</i>	15	
<i>Listing Appropriate Sites for Medication Injection</i>	10	
<i>Explaining the "Three Point Check" Technique:</i> <ul style="list-style-type: none"> ➤ Date on Medication (not expired), type, dosage ➤ Repeat After Drawing up Medication ➤ Repeat After Administering Medication and Chart 	10	
<i>Listing Steps for Administering Drug - IM</i>	5	
<i>Listing Steps for Administering Drug - SQ</i>	5	
<i>Explaining Appropriate Care of Equipment Used in Administering Medications</i>	5	
POINTS SCORED	100	
TOTAL PERCENT AWARDED	100%	

Instructors Initials: _____

TREATMENT OF SHOCK

100 possible points (%). Candidate must score a minimum of 80 points (%) to pass course.

Candidate Name: _____

Date: _____

Candidate Performance Standards	Points Possible	Points Awarded
<i>Defining Shock</i>	10	
<i>Identifying Pathophysiology of Shock</i>	5	
<i>Listing and Explaining Four Cellular Phases of Shock</i>	5	
<i>Listing Types of Shock</i>	5	
<i>Explaining Three Stages of Shock</i>	10	
<i>Describing How to Assess a Patient in Shock:</i> ➤ Defining "Primary Survey" and listing its three components ➤ Defining "Secondary Survey" and listing its two components	10	
<i>Listing Two Steps to Resuscitate a Patient in Shock:</i> ➤ Basic Life Support: position, warmth, oxygen therapy, CPR ➤ I.V. Fluid Therapy	10	
<i>Reasons for Using I.V. Therapy</i>	5	
<i>Listing Necessary Equipment for Administration of I.V. Fluids</i>	5	
<i>Explaining Appropriate Care of Equipment Used in I.V. Administration</i>	5	
<i>Detailing the Appropriate Procedure for Administration of I.V. Fluids</i>	10	
<i>Describing Appropriate Flow Rates for I.V. Administration</i>	5	
<i>Identifying S/S of I.V. Failure (infiltration)</i>	5	
<i>Listing Dangers of Inappropriately Placed or Maintained I.V.</i>	5	
<i>Identifying Appropriate Anti-hemorrhagic Medication</i>	5	
POINTS SCORED	100	
TOTAL PERCENT AWARDED	100%	

Instructors Initials: _____

I.V. THERAPY

100 possible points (%). Candidate must score a minimum of 80 points (%) to pass course.

Candidate Name: _____

Date: _____

	Points Possible	Points Awarded
<i>Reasons for Using I.V. Therapy</i>	10	
<i>Listing Necessary Equipment for Administration of I.V. Fluids</i>	10	
<i>Explaining Appropriate Care of Equipment Used in I.V. Administration</i>	10	
<i>Detailing the Appropriate Procedure for Administration of I.V. Fluids</i>	10	
<i>Describing Appropriate Flow Rates for I.V. Administration</i>	10	
<i>Identifying and list S/S of I.V. Failure (infiltration) and Dangers of Inappropriately Placed or Maintained I.V.</i>	10	
<i>Identifying Appropriate Anti-hemorrhagic Medication</i>	10	
<i>Demonstrating Non-Invasive Treatment on Live Model, including:</i> <ul style="list-style-type: none"> ➤ Appropriate Positioning for Shock 	10	
<i>Demonstrating Appropriate Steps for Administering an I.V. on a Mannequin</i>	10	
<i>Demonstrating Correct Administration of an I.V. on a Live Model</i>	10	
POINTS SCORED	100	
TOTAL PERCENT AWARDED	100%	

Instructors Initials: _____

SUTURING

100 possible points (%). Candidate must score a minimum of 80 points (%) to pass course.

Candidate Name: _____

Date: _____

Candidate Performance Standards	Points Possible	Points Awarded
<i>Explaining Basic Female Genital Anatomy</i>	5	
<i>Listing Methods for Preventing Perineal Damage</i>	5	
<i>Defining Degrees of Perineal Damage</i>	5	
<i>Explaining Steps to Evaluate Genitals for Damage Postpartum</i>	5	
<i>Explaining When Perineal Damage may Not Require a Repair</i>	5	
<i>Discussing Steps to Take if a Woman Refuses Repair</i>	5	
<i>Listing Types of Perineal Damage Which Requires Referral for Repair</i>	5	
<i>Explaining Risks of Poorly Done Repair to Women's Health</i>	5	
<i>Discussing Pros & Cons of Two Forms of Local Anesthetic:</i> ➤ Amide vs. Ester Based	5	
<i>Discussing Pros & Cons of Using Epinephrine in Local Anesthetic</i>	5	
<i>Explaining Preferred Use of Two Local Anesthetics, including route of administration:</i> ➤ Xylocaine (Lidocaine Hydrochloride) and Benzocaine (Cetacaine)	5	
<i>Listing Equipment Needed to Effect Repair of 1st Degree, 2nd Degree, 3^d Degree and Labial Lacerations</i>	5	
<i>Explaining Differences Between Synthetic and Organic Suture</i>	5	
<i>Explaining Differences in Needle Size and Cutting Edge and Most Appropriate Use of Each:</i> ➤ Taper ➤ Cutting ➤ Taper-Cutting	4	
<i>Discussing Which Instruments are Needed for Perineal Repair, including: Sizes, styles of needle holders, clamps, forceps and scissors</i>	3	
<i>Explaining Special Techniques for Working with Curved Needles</i>	3	
<i>Demonstrating Correct Use of Needle Holder to Make an Instrument Tie</i>	3	
<i>Discussing Pros & Cons of Hand Ties</i>	3	
<i>Demonstrating Four Basic Stitches:</i> ➤ Interrupted ➤ Basting ➤ Lock Blanket ➤ Running Mattress	3	
<i>Listing Steps for 1st and 2nd Degree Repair</i>	3	
<i>Listing Steps for 3^d Degree Repair</i>	3	
<i>Listing Steps for Labial Repair</i>	3	
<i>Explaining How to Maintain Aseptic Technique While Suturing</i>	3	
<i>Discussing Appropriate Disposal of Repair Waste, including sharps</i>	2	
<i>Discussing Pros & Cons of Subcuticular Closure in Perineal Repair</i>	2	
POINTS SCORED	100	
TOTAL PERCENT AWARDED	100%	

Instructors Initials: _____

NEONATAL RESUSCITATION - 1 OF 3

100 possible points (%). Candidate must score a minimum of 80 points (%) to pass course.

Candidate Name: _____

Date: _____

Candidate Performance Standards	Points Possible	Points Awarded
<ul style="list-style-type: none"> ◆ Explain O₂ concentrations from room air (21%) mouth to mouth (16%) and oxygen supply and source (50-100%) ◆ Discuss the relationship between oxygen concentration and heart pump efficiency. ◆ Explain differences between a “D” and an “E” cylinder. Aluminum and Stainless Steel. ◆ List safety precautions when working with oxygen, including use of cylinder stands. ◆ Explain the pressure regulator and flow meter. ◆ Explain and discuss types of o₂ delivery devices and the resulting percent of oxygen delivered. 	10	
<ul style="list-style-type: none"> ◆ Explain types and care of PPV devices/ambu bags in resuscitation. ◆ Demonstrate use of PPV devices/ambu bags including: <ul style="list-style-type: none"> ◆ Safety check ◆ Attaching tubing ◆ Attaching mask ◆ Demonstrate use of BVM in resuscitation 	5	
<ul style="list-style-type: none"> ◆ List items to include on a neonatal resuscitation equipment tray ◆ Demonstrate preparation of newborn resuscitation equipment tray 	5	
<ul style="list-style-type: none"> ◆ Describe the anatomy and physiology of the human airway including alveoli circulation ◆ List the four steps of neonatal transition when the cord is not cut ◆ Explain how neonatal transition differs with immediate cord amputation versus delayed cord cutting ◆ Describe the normal fetal and newborn stress response and its impact on transition ◆ Explain the physiology behind the technique of delayed cord clamping in the immediate postpartum 	5	
<ul style="list-style-type: none"> ◆ List two ways to administer free-flow oxygen ◆ List two places to check for heart rate on a newborn ◆ Describe how to assess heart rate in a depressed newborn ◆ List five clinical findings of a compromised newborn ◆ List three criteria for a “vigorous” newborn ◆ List five appropriate ways to stimulate a newborn ◆ List at least six inappropriate ways to stimulate a newborn and risks 	10	
<ul style="list-style-type: none"> ◆ Explain the “Resuscitation Flow Diagram” ◆ Assess and safety check equipment used for newborn resuscitation including: <ul style="list-style-type: none"> ◆ self inflating PPV ◆ newborn sized masks ◆ resuscitation tray ◆ suction devices ◆ oxygen tank and regulator ◆ orogastric tube ◆ Explain the difference between a “flow-inflating” and “self-inflating” resuscitation bag 	5	

NEONATAL RESUSCITATION – CONTINUED - 2 OF 3

100 possible points (%). Candidate must score a minimum of 80 points (%) to pass course.

<ul style="list-style-type: none"> ◆ Explain and demonstrate: ◆ Where to place newborn relative to mother ◆ What to use as a hard surface during resuscitation ◆ How to keep the newborn warm during resuscitation ◆ When to cut the cord during resuscitation ◆ Where on the cord to cut to create an optimal cord length ◆ How to position a newborn for resuscitation ◆ How to assess for breathing and normal circulation ◆ How to choose the correct mask size for the newborn requiring resuscitation ◆ How to position the mask correctly on a newborn ◆ When/how to administer free flow oxygen to a newborn using bag & mask ◆ How to warm oxygen when administering. 	10	
<ul style="list-style-type: none"> ◆ Explain and demonstrate: <ul style="list-style-type: none"> ◆ What to do in the first 30 seconds after every birth. ◆ What five things do you assess for If no to any of the five things, explain and demonstrate what eight things to do next. 	10	
<ul style="list-style-type: none"> ◆ Explain and demonstrate: <ul style="list-style-type: none"> When to start rescue breathing for a newborn. ◆ How to open an airway ◆ How to suction using a: <ul style="list-style-type: none"> ◆ Bulb syringe ◆ DeLee suction device ◆ Res-Q-Vac ◆ How to provide mouth-to-mouth and mouth-to-barrier breaths ◆ How to provide “Inflation” breaths, including rate and depth of breaths ◆ Difference between Inflation and Ventilation breaths ◆ How to provide Ventilation breaths ◆ How to use a PPV device with and without oxygen hook-up ◆ How and when to use an orogastric tube ◆ List four signs that neonatal condition is improving ◆ How to assess when positive pressure ventilation can be discontinued ◆ <u>Appropriate steps to newborn resuscitation (excluding compressions)</u> 	5	
<ul style="list-style-type: none"> ◆ Explain when to utilize chest compressions in neonatal resuscitation ◆ Explain and demonstrate; <ul style="list-style-type: none"> ◆ How to assess for heartbeat using cord pulse ◆ How to administer chest compressions ◆ How to coordinate chest compressions with positive-pressure ventilation ◆ When to stop chest compressions in order to assess ◆ How to monitor infant after cessation of chest compressions ◆ When to resume chest compressions and how long to continue ◆ When to call 911 ◆ Explain and demonstrate two options for finger position when administering chest compressions, with pros and cons ◆ List potential dangers associated with administering chest compressions (at least four) 	5	
<ul style="list-style-type: none"> ◆ Demonstrate appropriate steps to newborn resuscitation in sequence including chest compressions 	5	

NEONATAL RESUSCITATION – CONTINUED - 3 OF 3

100 possible points (%). Candidate must score a minimum of 80 points (%) to pass course.

<ul style="list-style-type: none">◆ Discuss benefits of using room air instead of 100% oxygen in resuscitating a newborn.◆ Explain how long room air should be used in neonatal resuscitation before switching to 100% oxygen◆ Demonstrate use of PPV device/ambu bag without 100% oxygen	5	
<ul style="list-style-type: none">◆ Demonstrate full neonatal cardiopulmonary resuscitation technique on a mannequin in an exam setting.	10	
<ul style="list-style-type: none">◆ Demonstrate knowledge of neonatal resuscitation through successful completion of a written exam.	5	
<ul style="list-style-type: none">◆ Describe the follow-up care in the first few hours following neonatal resuscitation of an infant whose Apgar score is less than seven at five minutes including assessing for hypoglycemia	5	
POINTS SCORED	100	
TOTAL PERCENT AWARDED	100%	