

Course Name	Learner Objective	Content	Time in minutes	Additional teaching methods/resources
BASIC COURSES				
ETHICS	<i>BFHI & WHO Code</i> To become familiar with international resources to protect, promote and support breastfeeding. To also become aware of public health issues and WHO code compliance in relation to breast milk substitutes.	<ul style="list-style-type: none"> • Global strategy for Infant and Young Child Feeding • International Code of Marketing of Breastmilk Substitutes • Baby Friendly Hospital Initiative (BFHI) 	180 min class work	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, current research, and cases
	<i>LC Ethics</i> To explore and discuss the scope of practice and legal issues surrounding the lactation consultant practice.	<ul style="list-style-type: none"> • IBLCE Code of Ethics • IBCLC Scope of Practice • Topics emphasized include: <ul style="list-style-type: none"> ○ Referrals and inter-disciplinary relationships ○ Medical-legal responsibilities ○ Confidentiality ○ Informed consent ○ Conflict of interest 	180 min class work + 120 min homework	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, current research, and cases • Graded assignment
BASIC SCIENCES	<i>Breast Anatomy & Physiology</i> To understand the anatomy and physiology of breasts during pregnancy and lactation— including anatomical development, hormonal responses, cellular mechanisms and variations of normal.	<ul style="list-style-type: none"> • Breast and nipple structure and development • Blood & lymph supply and nerve innervations • Lactocyte function and regulation • Mammogenesis and lactogenesis • Breastmilk synthesis and composition • Endocrine and autocrine regulation of milk synthesis • Variations of breast and nipple presentation 	180 min classwork + 120 min homework	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, current research, and cases • Graded assignment
	<i>Basic Immunology of Breastfeeding</i> To describe the immune components in breastmilk and understand the immunology of breastfeeding (not just breastmilk). To also have basic understanding of how breastfeeding protects against infections and disease.	<ul style="list-style-type: none"> • Introduction to innate and adaptive immunity • Detailed description of breastmilk specific immune components • Secretory immunity: entero-mammary link • Protection against infection and disease • Transmission of maternal infections 	180 min class work	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, and current research • Discussion on research regarding HIV and breastfeeding

	<p><i>Nutrition and Biochemistry of Breastfeeding</i></p> <p>To know the nutritional biochemistry of breastmilk and understand the effects of maternal diet on breastmilk composition. To also become familiar with well mother assessments</p>	<ul style="list-style-type: none"> • Energy-weight discrepancy • Biochemistry: water, fat, carbohydrates, protein, minerals, vitamins, bioactive components, hormones • Difference between preterm milk, colostrum, and mature milk • Effect of maternal diet on breastmilk components • Well mother assessment: What do we recommend regarding diet and non-essentials to various demographic populations 	<p>180 min classwork + 120 min homework</p>	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, and current research • Workshop discussing and strategizing practical well mother assessments & recommendations • Graded assignment
	<p><i>Breastmilk vs. Formula</i></p> <p>To identify the difference between breastmilk and artificial baby milks (ABM) and the effects and hazards of ABM</p> <p><i>Breastfeeding and Maternal Medication & Maternal Illness</i></p> <p>To describe the entry of medications into human milk and understand mechanisms by which certain medications enter and others do not. Also to distinguish which medications are appropriate/ inappropriate for breastfeeding mothers</p>	<ul style="list-style-type: none"> • Components of ABM and differences from breastmilk • Effects of artificial feeding • Environmental contaminants and hazards • Principles of drug use • Factors that affect entry of drugs into human milk • Overview of the effects of commonly used drugs including over the counter preparations, social or recreational drugs on lactation • Galactagogues/suppressants • Maternal illness and when breastfeeding is or is not contraindicated 	<p>180 min classwork + 120 min homework</p>	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, and current research • Graded assignment
	<p><i>General Paediatrics</i></p>	<ul style="list-style-type: none"> • TBA 	<p>180 min classwork</p>	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, and current research
CLINICAL PRACTICE	<p><i>Impact Of Birthing Practices On Breast-feeding</i></p> <p>To describe the implications of birth practices on breastfeeding and plan for how breastfeeding can continue under adverse situations</p>	<ul style="list-style-type: none"> • “Normal” physiological birth • Benefits of labour support • Labour procedures/protocols and their effects • Medications used and their effects • Intervention cascade & cumulative effects • Role of the lactation consultant in supporting breastfeeding despite interventions 	<p>180 min classwork + 120 min homework</p>	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, videos and current research • Workshop discussing and strategizing a plan for supporting breastfeeding • Graded assignment

	<p><i>Skin to Skin Care</i></p> <p>To appreciate the importance and benefits of skin to skin care in normalizing physiology and facilitating breastfeeding success</p>	<ul style="list-style-type: none"> • Effect on breastfeeding duration/exclusivity • Effect on physiology (homeostasis) • Effect on infant development • Effect on maternal-infant relationship 	180 min classwork	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, videos, cases and current research
	<p><i>Gospel of Latch and Flow</i></p> <p>To identify and achieve a good latch and ensure proper transfer of breastmilk</p>	<ul style="list-style-type: none"> • Latch and positioning • Assessing milk transfer (sucking vs drinking) • Protocol to increase breastmilk intake • Variations in normal feeding patterns 	360 min classwork	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, videos, current research and cases • Workshop discussing and strategizing a plan to support and promote breastfeeding in the first 24-48 hours in various birthing scenarios
	<p><i>Counselling Skills</i></p> <p>To become aware of the importance of the role of the lactation consultant and building rapport with the breastfeeding family. Also to understand the counselling process, strategies and skills to support the mother to achieve her own breastfeeding goals.</p>	<ul style="list-style-type: none"> • Adult education and learning styles • Building rapport • Tools that build connection • Affirmation • History taking-SOAP • Guiding skills • Effective problem solving 	360 min classwork	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including current research and interactive case studies • Role playing and group exercises • Workshop discussing effective problem solving
	<p><i>Tools Controversy</i></p> <p>To describe the proper and appropriate use of breastfeeding devices and technology and know advantages and disadvantages of each tool</p>	<ul style="list-style-type: none"> • Breastfeeding devices and equipment: <ul style="list-style-type: none"> ○ How to use them ○ When to use them or when not to use them • Handling and storing human milk • Human milk banking protocols 	360 min classwork	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, videos, current research and cases • Workshop on the controversy of using aid— what should LCs be putting in their toolbox?

	<p><i>Evidence Based Medicine</i></p> <p>To identify well conducted studies, accurately interpret them and be able to apply results to clinical practice. To also describe research methodologies, when to use them, and design an experiment</p>	<ul style="list-style-type: none"> • Defining Evidence Based Medicine (EBM) • Scientific Method • Types of research methods—hierarchy of EBM • Searching for literature • Experimental study design • Critical appraisal • Statistics 	<p>360 min classwork + 120 min homework</p>	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including visual diagrams/ models, current research and cases • Group exercises • Graded assignment
ADVANCED COURSES				
ADVANCED SCIENCES	<p><i>Advanced Immunology</i></p> <p>To appreciate the short-term and long-term immunological benefits of breastfeeding. To also describe the basic mechanisms of how breastfeeding may protect against various chronic diseases</p>	<ul style="list-style-type: none"> • Acute and chronic diseases affected by breastfeeding <ul style="list-style-type: none"> ○ Obesity ○ Inflammatory diseases ○ Cancer ○ Diabetes, etc... • Long-term outcomes of breastfeeding • Mechanisms of disease prevention 	<p>180 min classwork + 120 min homework</p>	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, current research and cases
	<p><i>Pathology Case Studies</i></p> <p>To identify acute and chronic maternal pathologies and describe possible influences on breastfeeding. To also provide breastfeeding management strategies to support breastfeeding under these situations</p>	<ul style="list-style-type: none"> • Signs and symptoms of acute and chronic maternal pathologies • How to do a differential diagnosis • Influences of maternal pathologies on breastfeeding • Breastfeeding management under adverse situations 	<p>180 min classwork</p>	<ul style="list-style-type: none"> • Case studies to practice diagnosing pathologies and providing strategies
SPECIAL BABIES	<p><i>Premature & Sick Babies</i></p> <p>To understand the breastfeeding challenges experienced by parents with infants with physical challenges and illnesses and provide management strategies.</p>	<ul style="list-style-type: none"> • Assessments and common treatment protocols for the following conditions: <ul style="list-style-type: none"> ○ Cleft palate ○ Trisomy 21 ○ Cardiac Anomalies ○ Endocrine Disorders ○ Premature and low birth weight babies • Breastfeeding management strategies for those conditions 	<p>180 min classwork + 120 min homework</p>	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, videos, current research and cases • Graded assignments

	<p><i>Hypoglycaemia & Jaundice</i></p> <p>To understand the physiological manifestations of hypoglycaemia and jaundice, how to identify “emergency” situations and provide breastfeeding management strategies when hypoglycaemia or jaundice is an issue.</p>	<ul style="list-style-type: none"> • Diagnosis and assessment of hypoglycaemia & jaundice—identifying inconsistencies • Common treatment protocols • Breastfeeding management strategies 	180 min classwork	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/models, videos, current research and cases
FEEDING THE NOT YET LATCHING BABY	<p>To identify how various factors may contribute to the baby not taking the breast and provide techniques to help facilitate the baby to latch</p>	<ul style="list-style-type: none"> • Defining “not yet latching” • Defining breastfeeding success • Reasons for breast refusal • Treatment strategies—when to use which method 	360 min classwork	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/models, videos, current research and cases • Live case study & round table discussion
MATERNAL CHALLENGES	<p><i>Biopsychosocial Perspectives</i></p> <p>To identify and emphasize the psychosocial challenges facing many breastfeeding mothers and provide management strategies and knowledge of available support services to enable the mother to breastfeed throughout her challenges</p>	<ul style="list-style-type: none"> • Grief, postnatal depression and psychosis • Effect of socio-economic, lifestyle, and employment issues on breastfeeding • Maternal role adaptation • Cultural beliefs and practices • Support systems • Mothers with special needs (e.g. adolescents) 	180 min classwork + 120 min homework	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/models, videos, current research and cases
	<p><i>Breast and nipple pain</i></p> <p>To differentiate between various causes of nipple and breast pain and provide the appropriate management strategies</p> <p><i>Complimentary feeding</i></p> <p>To advise regarding the introduction of solids, complementary feeding, and weaning under various circumstances (particularly for a mother going back to work)</p>	<ul style="list-style-type: none"> • Signs and symptoms of nipple and breast pathologies that cause pain and how to differentiate between them • Individualized treatment protocols for those pathologies • Introducing solids—when, why, and how • Breastfeeding management while feeding solids 	180 min classwork	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/models, videos, current research and cases
	<p><i>Late Onset of Slow Weight Gain</i></p>	<ul style="list-style-type: none"> • TBA 	180 min classwork	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/models, videos, current research and cases

CONTROVERSIAL ISSUES	<p><i>Cruelty of Breast is Best</i></p> <p>To describe the incongruencies between the societal pressures placed on mothers to breastfeed and the lack of support in helping them to do so and strategies to resolve them</p>	<ul style="list-style-type: none"> • IBCLC code of ethics & scope of practice • Breastfeeding promotion and community education • Support systems • Mothers' Guilt • Societal norms • What affects practitioners' decisions? 	<p>180 min classwork</p>	<ul style="list-style-type: none"> • Lecture with PowerPoint presentations including photos, visual diagrams/ models, videos, current research and cases • Round table discussion about strategies
	<p><i>Current & Controversial Research</i></p> <p>To analyze and interpret up to date and controversial research and re-evaluate current philosophies and practices regarding breastfeeding</p>	<ul style="list-style-type: none"> • Research topics may include: <ul style="list-style-type: none"> ○ Obesity ○ Allergy & Asthma ○ Smoking ○ Environmental Toxins ○ Adult Chronic Diseases * Note that topics may vary depending on the current controversial research each year 	<p>180 min classwork</p>	<p>Round table discussion and cases</p>