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LACTATION EDUCATION

for Health Professionals

ANNOTATED CURRICULUM

Compiled by

AMERICAN COLLEGE OF
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AND

INSTITUTE FOR
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Lactation Education for Health Professionals: Annotated Curriculum

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How to Use This Curriculum

This annotated curriculum was developed in response to the ever-increasing demand for more comprehensive teaching materials on the art and science of breastfeeding support. The curriculum, *Lactation Education for Health Professionals*, was first distributed in 1990 and has been used in a variety of teaching and training settings and programs worldwide. The objective in annotating this curriculum is to give teachers and trainers who may not have specialized in lactation the necessary reference materials to effectively present the curriculum.

The 15-unit course is designed to be adapted to meet the specific learning needs of students or trainees with varying educational levels and expertise. The curriculum is presented in six columns:

1. Major learning objectives for the unit

The objectives are the final measure of learning. By the end of the session, the student/trainee should be able to perform the objectives.

2. Core content for each objective

This represents the minimum information that needs to be covered to meet the objectives.

3. Related references

Articles and books listed in this column are part of the teaching packet. Optimally, the material should be supplemented with country-specific information.

4. Audiovisual and print materials

The use of these materials will depend on the availability of equipment. Again, audiovisuals that are country-specific should be included when available.

5. Suggested teaching methodology and outside resources

Research shows that adults learn better when they are involved in the learning process. Participatory activities including, reviewing case studies, brainstorming, demonstrations, and group discussions are encouraged, as is the inclusion of local experts and community members where appropriate.

6. Evaluation questions

General questions summarizing the core content are provided. Again, the teacher/trainer is encouraged to adapt and supplement these questions to meet local needs.

Although there are many articles and publications on the subject of breastfeeding, for practical purposes we limited the number of references cited in this curriculum. In selecting references, we chose materials that 1) covered the specific subject comprehensively, 2) were applicable worldwide, 3) introduced specific research or new concepts, 4) reflected the most current thinking on the subject, and 5) complemented each other. The list includes two general breastfeeding textbooks, *Breastfeeding: A Guide for the Medical Profession*, 4th edition, by Ruth Lawrence and *Helping Mothers to Breastfeed*, Revised edition, by Felicity Savage King. While these books cover much of the same information, they speak to different audiences; the former is more technical and U.S. based, while the latter can be better understood by auxiliary health workers and gives a more international perspective on the subject.

Also, we have included five references that deal specifically with the subject of lactational infertility and the Lactational Amenorrhea Method (LAM) (Unit VIII). Because this method is relatively new and not well known as yet, it often is excluded or incorrectly presented in lactation or family planning curricula. The core content of the unit combined with the LAM-related references present the most current research and guidance on the method and should provide an adequate introduction to the subject.

A complete bibliography of the above mentioned materials appears on page iii. When cited in the curriculum, references appear by the author's last name unless the author has more than one work in which case the works appear by title.

For the teacher/trainer who wishes to supplement these general references with country-specific data and related information, documents such as Demographic and Health Surveys country reports, UNICEF's annual *State of the World's Children*, and Ministry of Health or other health service statistics and policies on breastfeeding are excellent additions to this package.

Reference Materials

- "Consensus Statement on the Lactational Amenorrhea Method for Family Planning." 1996. submitted for publication, *International Journal of Gynaecology and Obstetrics*.
- Gray R et al. 1990. "Risk of ovulation during lactation." *Lancet*, 335: 25-9.
- Labbok M et al. 1995. *Breastfeeding: Protecting a Natural Resource*. Revised ed. (Washington DC: Institute for Reproductive Health).
- Labbok M, Cooney K and Coly S. 1994. *Guidelines: Breastfeeding, Family Planning, and the Lactational Amenorrhea Method-LAM*. (Washington DC: Institute for Reproductive Health).
- Labbok M et al. 1994. "The Lactational Amenorrhea Method (LAM): A postpartum introductory family planning method with policy and program implications," *Advances in Contraception*, 10: 93-109.
- Labbok M and Krasovec K. 1990. "Toward Consistency in Breastfeeding Definitions." *Studies in Family Planning*, 21(4): 226-30.
- Lawrence R. 1994. *Breastfeeding: A Guide for the Medical Profession*. 4th ed. (St. Louis: Mosby).
- Pérez A, Labbok M and Queenan J. 1992. "Clinical Study of the Lactational Amenorrhea Method for Family Planning." *Lancet*, 339: 968-70.
- Rodriguez-Garcia R, Schaefer L and Yunes J (eds). 1990. *Lactation Education for Health Professionals*. (Washington, DC: PAHO).
- Saadeh R (ed). 1993. *Breastfeeding: The technical basis and recommendations for action*. (Geneva: World Health Organization).
- Savage King F. 1992. *Helping Mothers to Breastfeed*. (Nairobi: AMREF).

Annotated Curriculum

Unit I. History of Breastfeeding (BF) Practices

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Describe the existing BF practices in light of their historical development	<ol style="list-style-type: none"> 1. BF in traditional societies 2. BF in the ancient world: Africa America Asia Europe 3. Traditional BF patterns 	<p>A: Saadeh, pp. 1-19</p> <p>A: Rodriguez-Garcia R, Schaefer L and Yunes J, pp. 130-35</p> <p>A2: Lawrence, pp. 6-13</p>	<p>Handouts</p> <p>Posters</p> <p>Slides and projector</p> <p>Transparencies and overhead projector</p>	<p>Lectures by sociologists, anthropologists, and historians</p> <p>Case studies</p> <p>Group discussions with local health practitioners</p> <p>Review of national and international research</p>	

Unit I. History of Breastfeeding (BF) Practices (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. (cont.) Describe the existing BF practices in light of their historical development	4. Changes in BF patterns due to industrialization 5. History of BF in <u>(name of country)</u> a) traditional BF practices in the country	A4: Lawrence, pp. 387-8 A4: Labbok M and Krasovec K, pp. 226-30 A5a: Savage King, pp. 155-7	Maps, graphs, charts, etc. Flipcharts and markers	Describe BF behaviors as practiced in ancient societies Review of readings and printed materials Conference room, small rooms for group work	What was the impact of industrialization on BF practices? Describe the current status of BF practices in this country and anticipated future trends. Include characteristic BF practices.

Unit II. Sociocultural, Technological, and Political Factors that Influence BF Practices

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Explain the impact of modern society on the role of women and traditional BF behaviors	1. The role of women in traditional society and the influence of modern society on: a) woman's work and the separation of mother and child b) woman as a maternal symbol c) woman as a sexual symbol • breast itself • youth d) family planning	A1a: Lawrence, pp. 387-403 A1c: Lawrence, pp. 181-201	Handouts Graphs, tables, diagrams, charts Flipcharts and markers Slides and projector Transparencies and overhead projector Movies, videos	Lectures by sociologists or psychologists Group discussions with midwives, doulas, traditional healers Review of research and readings	Describe how modern society has changed the role of women in the areas of: 1) women and work 2) the woman as a sexual symbol 3) BF in public.
	2. Traditional practices and beliefs relating to birth and the postpartum period, and the nutrition of the lactating mother	A2: Savage King, pp. 155-7	Interview guides	Presentations and demonstrations by empirical midwives and/or other community health workers and specialists in traditional beliefs and practices Student interviews with mothers and other community members to identify folk beliefs and practices	Identify 3 traditional practices or beliefs relating to lactating women and describe their impact on BF practices.

Unit II. Sociocultural, Technological, and Political Factors that Influence BF Practices (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. Explain the influence of technological change on child rearing and the nutrition of the mother/child unit	<ol style="list-style-type: none"> 1. The influence of modern society on the birth process and postpartum period, and the nutrition of the lactating mother <ol style="list-style-type: none"> a) hospital deliveries b) the working mother c) separation of mother and infant d) food consumption patterns 2. Traditional practices and beliefs regarding child raising and the impact of modern society <ol style="list-style-type: none"> a) introduction of bottles/formula b) weaning practices 3. Traditional medicine and its impact on BF <ol style="list-style-type: none"> a) empirical midwives b) doulas c) medicines 	<p>B1: Savage King, pp. 1-5</p>	<p>Observation guides</p>	<p>Observation of traditional medicine practitioners in the community</p> <p>Development of strategies for dealing with folk beliefs and practices</p> <p>Roleplaying</p> <p>Brainstorm with students to identify their own beliefs and biases</p>	<p>Analyze the impact of the introduction of bottles and formula on the practice of BF in this country.</p> <p>Describe how technological progress in medicine and health care have altered the birth experience for women and infants. Include positive and negative factors.</p> <p>Identify 3 folk beliefs or practices relating to child rearing and describe their impact on BF practices.</p>

Unit II. Sociocultural, Technological, and Political Factors that Influence BF Practices (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
C. Identify and analyze institutional changes in modern society and their influence on BF	1. The impact of modern health services on BF a) maternal-child health programs b) their objectives and goals c) strategies for achieving these goals d) implementation of strategies, and the resources available e) promotion of BF f) the dichotomy between official norms of service delivery and actual service delivery practices g) family planning programs and their impact	C1: Saadeh, pp. 20-48 C1a: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 16-26 C1b: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 20 (box) C1g: Savage King, pp. 100-105	Observation guide Movies, videos Handouts Copies of institutional norms and policies	Observation of institutions and their BF activities. Group discussion with maternal-child health/ family planning (MCH/FP) professionals Presentations by health professionals in the MCH/FP system	What are some of the strategies that MCH/FP programs can use to promote BF? Are they being used? If "yes," what changes in BF practices have been observed?

Unit II. Sociocultural, Technological, and Political Factors that Influence BF Practices (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
D. Identify legal, political, and community factors that influence BF practices	1. Laws that protect mothers and BF a) coverage b) extent to which they are implemented c) ethical considerations	D1, D2: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 22, 26	Copies of laws, policies, legislation	Review of existing laws by lawyers specialized in this area and/or members of citizen action groups.	
	2. National BF Commission and/or similar groups a) what exists b) types and extent of activities		Copies of Commission or other groups' documents	Presentation by members of the Commission or other groups	
	3. Community structures that support BF a) mother's clubs b) support groups c) child care facilities	D3: Saadeh, pp. 62-74 D3, D4: Savage King, pp. 3-5, 155-67	Observation guide	Observation of community leaders and members of local groups	Give examples of structures that support BF at the local, national, and international levels.
	4. The role of men in community decision making and its impact on BF a) male attitudes towards women and/or BF b) male support of BF	D4a,b: Lawrence, p. 196		Presentations by leaders and members of community groups	What are the activities, achievements, and limitations of community structures that support BF?
				Group discussion with public health nurses, health promoters, and midwives	

Unit II. Sociocultural, Technological, and Political Factors that Influence BF Practices (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
D. (cont.) Identify legal, political, and community factors that influence BF practices	5. International Code of Breastmilk Substitutes a) history • formula company marketing strategies • impact on BF practices • enactment of International Code b) implementation • worldwide • in this country c) role of service providers in the application of the code d) ethical considerations	D5: Savage King, pp. 167-70 D5a: Saadeh, pp. 88-9 D5a: Lawrence, pp. 24-7	Copies of the Code Video and monitor	Presentation by specialists on the Code covering its history and implementation Panels, round tables, and group discussions with representatives from involved sectors	Discuss the history of the International Code of Breastmilk Substitutes and its implementation in this country. Discuss the role of health-service providers in ensuring Code compliance.

Unit III. Current Status of Maternal and Child Health (MCH) in the Country and Risk Factors for MCH

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Describe the maternal-child population	1. Biopsychosocial profile of women of childbearing ages <ol style="list-style-type: none"> a) biological characteristics b) psychosocial and cultural characteristics c) epidemiological aspects d) the socioeconomic and educational level of the mother and their impact on BF practices e) women's characteristics during <ul style="list-style-type: none"> • pregnancy • birth • postpartum • lactation 	A1: Savage King, pp. 1-2 A1: Saadeh, pp. 1-19	Books, graphs, charts, diagrams Flipcharts and markers Slides and projector Transparencies and overhead projector Statistical data	Lectures Presentations and/or lectures by specialists on the topic: -sociologists -researchers -epidemiologists Review of research and readings Group discussion with medical and nursing faculty and service personnel	Analyze the impact of the mother's socio-economic level on BF practices. Interpret statistical data on maternal and infant mortality as it relates to BF data.

Unit III. Current Status of Maternal and Child Health (MCH) in the Country and Risk Factors for MCH (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. Diagnosis of the status of maternal-child health	1. Profile of the infant/child (0-2 years) <ul style="list-style-type: none"> a) characteristics of growth and development of the BF child b) characteristics of growth and development of the bottlefed child c) patterns of morbidity and mortality of the BF child d) patterns of morbidity and mortality of the bottlefed child e) psychological aspects, for example, level of abuse and abandonment according to feeding practices 	B1: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 4-7 B1a: Lawrence, pp. 359-86 B1c, B1d: Lawrence, pp. 28-33 B1e: Lawrence, pp. 186-8		Comparison of case studies of breast and bottle-fed infants by child growth and development specialists	What factors influence the morbidity and mortality of the infant/child (0-2 years) and how? Name at least 3 characteristics of the growth and development of the BF child.

Unit III. Current Status of Maternal and Child Health (MCH) in the Country and Risk Factors for MCH (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
C. Explain the role of weaning practices as a risk factor for the mother's and child's health	<ol style="list-style-type: none"> 1. Descriptions of various weaning practices 2. Effects of weaning on infant morbidity and mortality <ol style="list-style-type: none"> a) immunologic b) psychologic c) nutrition d) life expectancy 3. Effects of weaning on the mother <ol style="list-style-type: none"> a) contraception b) psychological impact <ul style="list-style-type: none"> • separation of mother and infant • may be seen as "failure" by mother/others-viewed as rejection, loss of control 	<p>C: Savage King, pp. 106-17</p> <p>C: Lawrence, pp. 311-22</p>	<p>Statistical data</p>	<p>Lectures by nutritionists</p> <p>Group discussions with lactation consultants</p> <p>Review of research by BF researchers</p> <p>Case studies</p>	<p>Describe different weaning practices and explain why some are considered a risk factor for mother and child.</p> <p>Indicate what weaning plan you would recommend to mothers and explain why.</p>

Unit IV. Biological and Psychosocial Aspects of BF

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Describe the psychosocial effects of BF for the mother	1. Psychosocial advantages for the woman a) bonding b) security c) self-image d) sexuality e) self-realization f) convenience	A1: Savage King, p. 25 (3.3 Bonding) A1: <i>Breastfeeding: Protecting a Natural Resource</i> , p. 8 A1: Lawrence, pp. 181-99	Videos, movies Transparencies and overhead projector Slides and projector	Faculty and service personnel review research and conduct group activities with BF mothers Group discussion with psychologists and sociologists	Explain the biopsychosocial advantages of BF for the mother, child, and society.
B. Explain the biological effects of BF for the mother	1. Biological advantages for the mother a) uterine involution b) prevention of hemorrhage and puerperal infections c) lowered incidence of breast and ovarian cancer d) amenorrhea and birth spacing e) mood alteration and effects of prolactin f) quicker return to antepartum weight	B1: Savage King, pp. 24-34 (3.3 The Mother's Health) B1: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 7-11	Graphs, charts, tables, diagrams Statistical data	Lectures with specialists in the topics Panel discussion including obstetricians, gynecologists, lactation consultants, and nurse-midwives	Written and oral analysis of the advantages and disadvantages of BF in the case study of a specific family situation.

Unit IV. Biological and Psychosocial Aspects of BF (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
C. Describe the psychosocial effects of BF on the child	1. Psychosocial advantages for the child a) socialization and security b) early stimulation and sensory development c) bonding d) ability to show affection	C1: Savage King, pp. 24-34 C1: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 4-7, 11	Observation guide	Comparison of case studies of breastfed and bottle-fed infants Observation	Analysis of case studies
D. Explain the biological effects of BF on the child	1. Biological advantages for the child a) immunological protection b) nutrition c) hydration d) prevention of: - otitis media - bronchoaspiration - obesity - allergies e) contributes to mouth and jaw development	D1: <i>Breastfeeding: Protecting a Natural Resource</i> , pp.4-7 D1d: Lawrence, pp. 438-9, 379-84, 541-51	Statistical data Graphs, charts, tables, diagrams		Analysis of case studies

Unit IV. Biological and Psychosocial Aspects of BF (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
D. (cont.) Explain the biological effects of BF on the child	1. (cont.) f) appropriate milk temperature g) rapid, easy digestion h) milk is free of pathogens				
E. Describe the effects of BF on the family	1. Advantages for the family a) integration b) saves money and resources <ul style="list-style-type: none"> • healthier children, fewer medical expenses • no need to buy formula • more money for maternal/family nutrition c) may be easier to feed the baby when outside the home	E1: Savage King, pp. 31-4 E1: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 11-14	Interview guides	Interviews with lactating mothers and their families Testimonials	For what reasons did the family(ies) interviewed choose BF? What do they perceive as the advantages and disadvantages?

Unit IV. Biological and Psychosocial Aspects of BF (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
F. Describe the effects of BF on society	1. Advantages for society a) increased life expectancy b) decreased abandonment, abuse and violence c) less spending of national monies d) decreased reliance on outside assistance e) saving of national resources <ul style="list-style-type: none"> • water • fuel • milk/formula imports 	F1: Savage King, pp.35-7 F1: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 12-14	Charts, graphs, tables, diagrams Statistical data	Review of research and readings Testimonials by social/community leaders Presentation or lectures by -educators -economists -sociologists -social workers	Explain why BF is advantageous for society.
G. Indicate the perceived disadvantages of BF	1. Perceived disadvantages of BF a) too much trouble b) mother is tied down c) BF is painful d) baby cried too much e) mother did not have enough milk f) difficult for single mother with no support g) BF takes too much time	G1: Savage King, pp. 156-7, 16-17, 59-78 G1: Lawrence, p. 212		Review of interviews with families Brainstorming by students Testimonials by lactating mothers Interviews with lactating mothers, mothers who have never breastfed, and mothers with a variety of BF experiences Lactation consultants	Identify several perceived disadvantages of BF.

Unit V. Anatomy of the Breast and the Physiology of Lactation

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Identify the external and internal structures of the breast	<ol style="list-style-type: none"> 1. Identification and definition of: <ol style="list-style-type: none"> a) superficial anatomy b) support structures c) nipple and areola d) nerves e) vascular and lymphatic drainage 2. Characteristics of the anatomical structures <ol style="list-style-type: none"> a) innervation b) blood flow 3. Development of the breast <ol style="list-style-type: none"> a) prepubertal growth b) during puberty and adolescence c) normal, non-pregnant state d) modifications during the menstrual cycles 4. Biological and hormonal changes during: <ol style="list-style-type: none"> a) pregnancy b) lactation 	<p>A: Savage King, pp. 6-23</p> <p>A: Lawrence, pp. 37-58</p>	<p>Graphs, diagrams, drawings</p> <p>Slides and projector</p> <p>Transparencies and overhead projector</p> <p>Models, mannequins</p> <p>Books</p>	<p>Presentations/lectures by:</p> <ul style="list-style-type: none"> -nurse midwives -nursing faculty -obstetricians -gynecologists <p>Laboratory session with models</p> <p>Review of research and readings</p>	<p>Given the following diagram, identify the internal and external structures of the breast.</p> <p>Explain the function of specific parts of the breast.</p>

Unit V. Anatomy of the Breast and the Physiology of Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. Explain the functioning of the glandular structure of the breast and the neuroendocrine reflexes that intervene in milk production	<ol style="list-style-type: none"> 1. Role of hormones that intervene in the production and ejection of milk <ol style="list-style-type: none"> a) prolactin b) oxytocin c) estrogen d) progesterone e) others 2. Mechanisms in the production and secretion of milk <ol style="list-style-type: none"> a) in the child <ul style="list-style-type: none"> • rooting reflex • suckling reflex • swallow reflex b) in the mother <ul style="list-style-type: none"> • nipple erection • production reflex • let-down reflex • supply and demand 3. Analysis of breast-milk <ol style="list-style-type: none"> a) composition b) biochemical values c) stages <ul style="list-style-type: none"> • colostrum • transitional • mature 	<p>B1: Savage King, pp. 6-16</p> <p>B1: Lawrence, pp. 59-78</p> <p>B2a: Lawrence, pp. 216-24</p> <p>B2b: Lawrence, pp. 250-56</p> <p>B3: Savage King, pp. 24-31</p> <p>B3: Lawrence, pp. 91-148</p>	<p>Video and monitor</p> <p>Movie and projector</p>	<p>Observation of a mother breastfeeding</p>	<p>Explain the role of hormones and mother/child reflexes in the production, secretion, and ejection of milk.</p>

Unit V. Anatomy of the Breast and the Physiology of Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
C. Identify the factors that affect the production and ejection of milk	1. Factors that affect the production and ejection of milk a) stress b) fatigue c) emotional factors d) baby's nursing habits <ul style="list-style-type: none"> • frequency • duration • adequacy of suckling • adequacy of position • structural abnormalities in baby's mouth • medications • nutrition and health of the mother 2. Techniques for managing the factors named in C.1	C: Savage King, pp. 9-11 C: Lawrence, pp. 253-73 C1d: Lawrence, pp. 454-58	Case study guide	Analysis of case studies	Identify 3 factors that can interfere with milk production and ejection and explain their effects. Describe how to overcome them.

Unit VI. Nutrition of the Mother and Child During Lactation

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Identify and analyze the nutritional requirements of the mother during lactation	1. Maternal nutritional requirements during lactation <ol style="list-style-type: none"> calories protein iron calcium vitamin A vitamin C vitamin B niacin folic acid water 	A: Lawrence, pp. 279-310	Graphs, tables, diagrams of nutritional requirements Transparencies and overhead projector Slides and projector	Lectures by specialists, including: -medical and nursing faculty -nutritionists Review of research and readings	List the nutritional requirements of a lactating mother.
B. Determine the appropriate food and fluid intake for a lactating mother	1. Maternal nutrition and its effect on the volume and composition of milk produced 2. Influence of BF on the nutritional status of the mother 3. Supplementation of the mother versus the infant	B: <i>Breastfeeding: Protecting a Natural Resource</i> , p. 8 B: Lawrence, pp. 279-310			Explain the role of the mother's nutritional habits in milk production and her infant's nutrition.

Unit VI. Nutrition of the Mother and Child During Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. (cont.) Determine the appropriate food and fluid intake for a lactating mother	3. General recommendations regarding maternal eating habits during lactation a) foods that can cause gas/loose bowels in the child	B3: Savage King, pp. 74-5 B3: Lawrence, pp. 656-61 B3a: Lawrence, p. 305			
C. Recommend adequate nutritional practices to a lactating mother	1. Steps in carrying out a) nutritional history b) observation of dietary practices in the home c) 24-hour recall d) identification of nutritional deficiencies 2. The typical diet in the region/country a) common deficiencies b) folk beliefs about diet	C: Savage King, pp. 150-51, 155-6	Implementation and interpretation guidelines Case study guidelines Flipcharts and markers Lists of the nutritional content of common foods	Practice in small groups of the 3 techniques and interpretation. Analysis of case studies Nutritionists	

Unit VI. Nutrition of the Mother and Child During Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
C. (cont.) Recommend adequate nutritional practices to a lactating mother	3. Foods available in the region/country, their nutritional value and their costs 4. Specific recommendations to correct the most common dietary deficiencies in the region/country		Pictures/samples of common foods		Elaborate a nutritional plan for a lactating mother, using the locally available foods and taking into consideration the economic resources of the family.
D. Describe the nutritional requirements of the BF child	1. Nutritional requirements of the child while BF a) the first 6 months, breast-milk only • hydration b) after 6 months, introduction of other foods with BF first 2. Infant growth patterns a) with breastmilk only b) with formula	D: Savage King, pp. 35-41, 106-17 D1a: Lawrence, p. 302 D1b: Lawrence, pp. 313-14	Tables, charts, slides, transparencies Growth charts of BF and bottle-fed infants	Pediatrician's analysis of cases Group work Case studies—comparison of BF and bottle-fed infants Nutritionists	Identify the nutritional requirements of the BF child who is 3 months old.

Unit VI. Nutrition of the Mother and Child During Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
E. Explain the importance of exclusive BF for the first 6 months of life	1. Comparison of breastmilk with other milks and substitutes	E: Lawrence, pp. 104, 112, 118, 653-5 E: Savage King, p. 34	Table of the composition of breastmilk, other milks and substitutes	Presentations by community health workers: -nurse midwives -public health specialists -health promoters -nutritionists	Develop a table comparing breastmilk, other milks, and substitutes.
F. Recommend the dietary intake that the child requires after 6 months, in addition to breast-milk	1. Complementary foods: a) traditional practices b) introduction of appropriate solids and liquids (specific recommendations) c) in months 6-24 d) in years 2-4 2. Weaning a) traditional practices b) directed by the child c) directed by the mother	F1, F2: Savage King, pp. 34, 106-17 F2: Lawrence, pp. 311-22.	Case study guides	Lectures by specialists, weaning mothers Work in small groups Group discussion Analysis of cases	Develop dietary plans for an infant 7 months to 1 year, using the foods commonly available and in line with the family's economic resources. Discuss feeding of the 2-4 year old.

Unit VII. Lactation and Sexuality

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Identify the physiological changes that occur in the woman during lactation and relate these to the sexual activity of the couple.	<ol style="list-style-type: none"> 1. Physiological changes in the reproductive organs 2. Their impact on sexuality and sexual activity <ol style="list-style-type: none"> a) physical <ul style="list-style-type: none"> • vaginal dryness • decreased sexual encounters • decreased libido • milk leaking b) psychological <ul style="list-style-type: none"> • in the woman • in the man c) cultural taboos and practices d) male's role in the couple's sexuality during lactation 	<p>A: Savage King, pp. 100-101</p> <p>A1, A2: Lawrence, pp. 591-4</p> <p>A2: Savage King, p. 95</p>	<p>Videos</p> <p>Handouts</p>	<p>Lectures by specialists, including:</p> <ul style="list-style-type: none"> -psychologists -medical and nursing faculty <p>Group discussion</p> <p>Interviews with mothers and their partners</p> <p>Review of research and readings</p>	<p>How does BF affect the couple's sexual activity?</p>

Unit VIII. Lactation and Birth Spacing: The Lactational Amenorrhea Method (LAM) and Other Methods

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Explain the impact of BF on birth spacing	<ol style="list-style-type: none"> Impact of BF on fertility <ol style="list-style-type: none"> on populations on the individual woman Physiology of lactational infertility <ol style="list-style-type: none"> impact of nipple stimulation on hypothalamic-pituitary-ovarian feedback mechanisms Lactational amenorrhea vs. lactational menses <ol style="list-style-type: none"> probability of conception during amenorrhea vs. during menses within 6 months postpartum after 6 months postpartum 	<p>A1: <i>Breastfeeding: Protecting a Natural Resource</i>, pp.8-13</p> <p>A2: <i>Guidelines: Breastfeeding, Family Planning, and the Lactational Amenorrhea Method-(LAM)</i>, p. 4</p> <p>A3: Gray R et al. pp. 25-9</p> <p>A3: Savage King, pp.100-101</p>	<p>Graphs, tables, charts, diagrams</p> <p>Demographic data</p> <p>Slides and projector</p> <p>Transparencies and overhead projector</p> <p>Drawings, models</p>	<p>Lecture by specialists, including:</p> <ul style="list-style-type: none"> -medical and nursing faculty -nurse midwives -lactation consultants -researchers <p>Review of research and readings</p> <p>Group discussion</p>	<p>Briefly describe the physiology of lactational infertility.</p>

Unit VIII. Lactation and Birth Spacing: The Lactational Amenorrhea Method (LAM) and Other Methods (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. Explain the Lactational Amenorrhea Method (LAM), including criteria for its use; the method's efficacy; instructions for its effective use; and timely introduction of complementary family planning	1. Criteria for the use of LAM (algorithm)	B: <i>Guidelines: Breastfeeding, Family Planning, and the Lactational Amenorrhea Method-(LAM)</i> , pp. 1-4	Interview guides Copies of the algorithm	Interviews with health professionals, traditional health practitioners and mothers about their views on BF for child spacing	What are the 3 criteria for the use of LAM?
	2. Recommendations for the effective use of LAM a) success depends on pattern of BF b) optimal BF behaviors	B: "Consensus Statement on the Lactational Amenorrhea Method for Family Planning."	Case studies	Small group discussion of issues involved in use of LAM	What is the 4th parameter of the method? What is the definition of "menses return"?
	3. Transition from discontinuation of LAM to complementary FP method	B1-4: Savage King, pp. 101-5 B1: Prérez, et al. pp. 968-70.		Analysis of case studies	What BF behaviors are important for effective LAM use?
	4. Recommendations for patient counseling and education in LAM a) information to be covered b) special considerations	B2: <i>Guidelines: Breastfeeding, Family Planning, and the Lactational Amenorrhea Method-(LAM)</i> , pp. 5-8 B4b: "The Lactational Amenorrhea Method (LAM): A postpartum introductory family planning method with policy and program implications," pp. 102-3	Counseling guides and checklist	Practice counseling sessions with counseling specialists Roleplaying	

Unit VIII. Lactation and Birth Spacing: The Lactational Amenorrhea Method (LAM) and Other Methods (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
C. Describe the various family planning methods, and their interaction with BF	1. Family planning methods and their use during breastfeeding a) LAM and the initiation of complementary FP methods b) review of specific FP methods and the advantages and disadvantages of each in relation to BF	C: <i>Guidelines: Breastfeeding, Family Planning, and the Lactational Amenorrhea Method-(LAM)</i> , pp. 10-13 C: Lawrence, pp. 584-91	Samples of family planning methods	Presentation of individual methods by students Family planning professionals and service providers	What methods of family planning are considered "complementary" to lactation? When should they be started?

Unit IX. Clinical Skills for the Initiation and Management of Lactation

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Teach mothers about BF and BF techniques	<u>Prenatal</u>				
	1. Mother's medical and social history a) evaluation of physical and mental health of the pregnant woman b) diagnosis c) plan of interventions d) reevaluation	A1: Savage King, pp. 135-54	Diagrams, drawings Transparencies and overhead projector Slides and projector Observation guides Models, mannequins, videos, movies	Lectures with BF specialists such as: faculty, lactation consultants, health educators, midwives, nurses, obstetricians, and gynecologists Observation of a prenatal class for mothers Classroom demonstration and role playing Clinical observation and practice Practicum with lactating mothers and babies	Given the following case study, develop a medical and social history for the pregnant woman and an appropriate care plan. Develop the content for a prenatal BF class for pregnant women. Clinical observation of student's performance.
	2. Education and information on: a) advantages and disadvantages of BF b) clarification and correction of myths, folk beliefs, and taboos c) the importance of BF as soon after delivery as possible d) importance of colostrum e) positions and techniques of BF f) the role of the father in BF	A2a: Savage King, pp. 24-8 A2b: Savage King, pp. 156-7 A2c, A2d: Savage King, pp. 35-42 A2e: Savage King, pp. 12-23 A2f: Savage King, pp. 4, 77			

Unit IX. Clinical Skills for the Initiation and Management of Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. (cont.) Teach mothers about BF and BF techniques	2. (cont.) g) nutrition of the lactating mother (Refer to Unit VI) h) examination and evaluation of the breasts and nipples i) care of the breast and nipple j) special care of the different types of nipples <ul style="list-style-type: none"> • inverted • flat 	A2h, A2i, A2j: Savage King, pp 50-54 A2i, A2j: Lawrence, pp. 224-31		Members of La Leche League and other support groups	What is the prenatal care for normal nipples? inverted nipples? flat nipples?
B. Manage the initiation and continuation of BF	<u>Postnatal</u> 1. Encourage first feeding as soon as possible after birth a) use of colostrum b) frequent, on-demand feedings thereafter 2. Encourage rooming-in for frequent on-demand feedings	B1, B2: Savage King, pp. 35-41 B1: Lawrence, pp. 231-6		BF mothers and their babies Observation of institutional and community practices Lectures by lactation consultants Clinical observation and practice Demonstrations	Evaluate the technique used by a new mother and indicate/take the appropriate actions.

Unit IX. Clinical Skills for the Initiation and Management of Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. (cont). Manage the initiation and continuation of BF	<p>3. BF techniques and positions</p> <ul style="list-style-type: none"> a) face to face b) lying down c) sidesitting d) with a cesarean section e) initiation of rooting reflex f) attachment g) suck/swallow h) removal from the breast i) burping j) frequency and duration: on-demand, until the baby finishes, alternate breast used first in each feeding k) methods to rouse a sleepy baby l) participation of the father <p>4. Examination and evaluation of the breast and nipple for common problems</p>	<p>B3: Rodriguez-Garcia R, Schaefer L, and Yunes J, pp. 165-80</p> <p>B3: Lawrence, pp. 235-6</p> <p>B3d: Savage King, p. 99</p> <p>B4: Savage King, pp. 51-4</p>	<p>Models, dolls, mannequins, drawings and diagrams</p> <p>Observation guides</p> <p>Videos, movies</p> <p>Transparencies and overhead projector</p>	<p>Review of research and readings</p> <p>Lectures by specialists</p> <p>Cinical observation and practice</p> <p>Analysis of case studies</p> <p>Clinical observation and practice</p>	<p>Demonstrate a correct technique for positioning and removing the baby at the breast.</p> <p>Describe the infant's sucking and swallowing pattern.</p> <p>Explain and demonstrate how to deal with the most common breast and nipple problems.</p>

Unit IX. Clinical Skills for the Initiation and Management of Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. (cont.) Manage the initiation and continuation of BF	<p>5. Prevention/treatment of:</p> <p>a) inverted or flat nipples</p> <p>b) nipple trauma</p> <p>c) engorgement</p> <p>d) plugged ducts, mastitis</p> <p>e) difficulties with the let-down reflex</p> <p>f) perceived low milk supply</p> <p>g) actual low milk supply (see Unit IX C.5)</p>	<p>B5: Lawrence, pp. 236-47</p> <p>B5b: Savage King, pp. 48-51</p> <p>B5c, B5d: Savage King, pp. 43-8</p> <p>B5e: Savage King, pp. 10-11, 68-9</p> <p>B5f: Savage King, pp. 59-71</p>		<p>Lactation consultants</p> <p>Members of support groups</p> <p>Lactating mothers and infants</p>	<p>Demonstrate the correct care for 2 early problems commonly experienced by the BF mother.</p> <p>What is the most effective way to prevent engorgement?</p> <p>What is the most effective way to prevent sore or cracked nipples?</p>
	<p>6. The use of drugs and traditional medicine during lactation</p>	<p>B6: Lawrence, pp. 323-58</p>		<p>Presentations by:</p> <ul style="list-style-type: none"> -pharmacologists -pharmacists -practitioners of traditional medicine 	<p>Which drugs are completely prohibited during lactation? Why?</p>

Unit IX. Clinical Skills for the Initiation and Management of Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. (Cont.) Manage the initiation and continuation of BF	7. Expression of breastmilk a) methods • manual/hand • mechanical b) storage of milk c) use of stored milk	B7: Savage King, pp. 80- 83, 118-26 B7a: Lawrence, pp. 801-2 B7, B8: Lawrence, pp. 599- 632	Sample pumps Guidelines on pumping, storing, and using breastmilk	Clinical observation and practice Laboratory practice	Explain and demonstrate the appropriate technique for manual expression of breastmilk.
	8. Overview of other BF equipment and its appropriate uses a) nipple shields b) breast cups or shells c) breast pads/liners d) BF supplementer devices	B8: Lawrence, pp. 228-30	Samples of equipment		Explain and demonstrate the appropriate and inappropriate use of nipple shields and breast cups.
C. Support the maintenance of BF	1. Nutrition of the mother and child a) taboos b) importance of colostrum	C1a, b: Savage King, pp. 26-7, 158-9		(See Unit VI) Clinical practice	Observe and assess student's performance.

Unit IX. Clinical Skills for the Initiation and Management of Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
C. (cont.) Support the maintenance of BF	1. (cont.) c) complementary feedings d) weaning	C1c, d: Savage King, pp. 106-17			
	2. Typical newborn sleep/ wake patterns		Graphic representations of patterns	Lectures by lactation consultants and/or nurse midwives	
	3. Significance and types of infant crying a) techniques to calm the baby	C3: Savage King, pp. 71-7	Observation guides Log sheets	Observation and log of infant behavior and/or elimination patterns by students	
	4. Elimination patterns of the newborn a) frequency of wet diapers as an indication of adequate fluid intake b) appearance and frequency of breast milk stools vs. formula stools c) diarrhea and its treatment d) changes over time	C4: Savage King, pp. 27-8, 61, 109-12 C4a: Lawrence, p. 273		Log of infant behavior and elimination patterns by mothers for longer periods and analysis of logs	Describe the differences in the stool of breast and bottle-fed infants. Explain why.

Unit IX. Clinical Skills for the Initiation and Management of Lactation (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
C. (cont.) Support the maintenance of BF	5. Patterns of infant growth and weight gain in relation to the type of feeding they receive a) growth spurts and changes in feeding frequency b) slow weight gain and low milk supply	C5: Savage King, pp. 61- 71 C5: Lawrence, pp. 359-86	Tables, graphs, diagrams Growth charts	Analysis of case studies of BF and bottle-fed infants	Develop a list of instructions to be given to the BF mother before she leaves the hospital concerning what she should expect in the first few weeks at home, and how to care for herself and her infant.

Unit X. Lactation Management: Mothers Who Work Outside the Home and Other Special Circumstances

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Assist mothers who work outside the home to maintain BF	1. Technical aspects a) reverse rhythm BF b) how to express and store breastmilk	A: Saadeh, pp. 93-112 A1: Savage King, pp. 78-83, 41 (4.8)		Lectures by lactation consultants, nurses, and nurse midwives BF mothers who work outside of the home	Develop a list of recommendations for the mother who works or is separated from her infant for long periods of time.
	2. Psychosocial aspects a) child care b) involvement and role of the father c) mother support groups	A1: <i>Guidelines: Breastfeeding, Family Planning, and the Lactational Amenorrhea Method-(LAM)</i> , p. 9 A1: Lawrence, pp. 387-404		Discussions with lawyers, fathers, representatives from support groups, and employers	
	3. Legal aspects a) legislative protection for the BF working mother	A2: Savage King, pp. 3-5, 136, 159-62			
B. Support and manage the maintenance of BF in special circumstances	<u>Child</u>				
	1. Multiple births	B1: Savage King, pp. 84-5 B1: Lawrence, p. 433	Diagrams, drawings Models, dolls, mannequins	Lectures with specialists such as gynecologists, neonatologists, lactation consultants, and midwives	

Unit X. Lactation Management: Special Circumstances (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. (cont.) Support and manage the maintenance of BF in special circumstances	<u>Child (cont.)</u> 2. Premature/low birth weight 3. Jaundice 4. With common illnesses: a) vomiting, diarrhea/ gastro-intestinal infections • stress the importance of continuing to BF b) respiratory infections c) colic 5. Hospitalized 6. With congenital defects a) cleft lip and palate b) Down's Syndrome c) neuromuscular defects 7. Allergies 8. Slow growth 9. Other	B2: Savage King, pp. 84-6. B2: Lawrence, pp. 407-30 B3: Lawrence, pp. 446-54 B4: Lawrence, pp. 434-37 B4b: Lawrence, pp. 548-53 B4c: Lawrence, pp. 269-72 B6a: Lawrence, pp. 454-8 B6a: Savage King, p. 91 B6b: Lawrence, pp. 443-5 B7: Lawrence, pp. 548-53 B8: Savage King, pp. 65-6	Observation guide Case studies guide Movies, videos Transparencies and overhead projector Slides and projector	Clinical observation and practice Review of research and readings Group discussion Analysis of case studies Laboratory practice Pediatricians BF mothers and children, including BF mothers who have had problems but overcame them Lactation consultants, nurses, and midwives	What is the best intervention for an infant with jaundice at 2 days? at 2 weeks? What would be your advice to a mother whose infant has diarrhea? Why?

Unit X. Lactation Management: Special Circumstances (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. (cont.) Support and manage the maintenance of BF in special circumstances	<p><u>Mother</u></p> <ol style="list-style-type: none"> 1. With acute infectious or non-infectious diseases 2. Hospitalized 3. Diabetes 4. Tuberculosis 5. Epilepsy 6. AIDS 7. Hyper and hypothyroidism 8. Hepatitis 9. Herpes 10. Allergies 	<p>B1: Lawrence, pp. 476-96</p> <p>B2: Lawrence, pp. 520-23</p> <p>B3: Lawrence, pp. 499-505</p> <p>B4: Lawrence, pp. 481-2</p> <p>B5: Lawrence, pp. 516-17</p> <p>B6: Lawrence, pp. 208-10</p> <p>B7: Lawrence, pp. 505-7</p> <p>B8: Lawrence, p. 490-91</p> <p>B9: Lawrence, pp. 485-6</p>	Video and monitor	Specialists in these areas Lectures and group discussion	<p>What illnesses or circumstances involving the mother and/or child are temporary contraindications to BF? Which are permanent contraindications? Why?</p> <p>Should a mother with AIDS breastfeed her baby? Explain your answer.</p>

Unit X. Lactation Management: Special Circumstances (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. (cont.) Support and manage the maintenance of BF in special circumstances	<u>Mother</u> (cont.) 11. After breast surgery/ cancer 12. Physically handicapped 13. Mentally handicapped a) mental retardation b) psychiatric problems	B11: Lawrence, pp. 528-31 B13b: Lawrence, pp. 532-4		Testimonials of women who have experienced these problems Psychologists	

Unit XI. Communication and Teaching Skills for Health and Other Professionals

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Identify the teaching/ learning needs of individuals and groups	<ol style="list-style-type: none"> 1. Principles of communication 2. Conceptual basis for teaching/learning of adults 3. Identification of students' characteristics 4. Needs assessment 		<p>Transparencies and overhead projector</p> <p>Slides and projectors</p>	<p>Lectures with specialists in communication, education, curriculum development, and audiovisual materials</p> <p>Small group work</p> <p>Group discussion</p> <p>Workshops</p> <p>Representatives from IBFAN</p>	<p>Describe the steps in the development of a teaching plan.</p> <p>What are the characteristics of adult teaching/learning?</p>

Unit XI. Communication and Teaching Skills for Health and Other Professionals (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. Design teaching plans for use with mothers, professionals, and other groups	1. Planning the adult learning process a) behavioral objectives b) content c) teaching methodologies d) development and organization of materials and resources e) evaluation criteria	B1: Saadeh, pp. 49-61	Sample formats used in developing teaching plans Videos Observation guidelines	Observation and critique of education sessions Workshop by training specialist on the design and implementation of an instructional plan for mothers or other groups Conference room	Design a teaching plan for: a) a group of maternity nurses b) mothers who have had cesareans c) nutritionists d) physicians
C. Apply the appropriate theoretical and clinical teaching techniques to groups and individuals, using a variety of methodologies	1. Participatory and interactive teaching a) integration of theory and practice 2. Use of participatory learning methodologies and feedback 3. Group dynamics		Teaching plan	Classroom practice of teaching Practicum on use of group dynamics Observation of students practicing a teaching session Observe students giving feedback to colleagues	

Unit XI. Communication and Teaching Skills for Health and Other Professionals (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
D. Utilize appropriate resources for teaching	<ol style="list-style-type: none"> 1. Utilization of audio-visual (AV) and other materials <ol style="list-style-type: none"> a) principles b) techniques 		<p>Posterboard, paper, markers, paint, glue, magazines, etc. to make visual materials</p> <p>Examples of AV materials</p>	<p>Procurement and critique of examples of AV materials</p> <p>Workshop on the development of simple visual materials</p> <p>Observe students giving feedback to colleagues.</p>	<p>What are the basic principles in the development of AV materials?</p> <p>Evaluate the following examples of AV materials.</p>
E. Carry out, evaluate and follow-up educational programs on BF	<ol style="list-style-type: none"> 1. Evaluation of knowledge, skills and attitudes 2. Evaluation methods 3. Type of evaluation <ol style="list-style-type: none"> a) diagnosis b) formative c) sumative d) quantitative e) qualitative 		<p>Examples of evaluation instruments</p> <p>Evaluation guidelines</p>	<p>Workshop for the development of an evaluation instrument based on the teaching plan developed earlier with evaluators and educators</p> <p>Classroom practice of evaluation skills</p>	<p>Develop an evaluation plan for a given teaching session.</p>

Unit XII. Communication and Counseling Techniques for BF Education at the Family Level

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Counsel and educate mothers on appropriate BF practices	<ol style="list-style-type: none"> Principles of counseling Counseling techniques 	<p>A1, A2: Savage King, pp. 135-54</p> <p>A2: Lawrence, pp. 641-4</p>	Counseling guidelines	<p>Lectures by counselors and other specialists, including:</p> <ul style="list-style-type: none"> -sociologists -social workers -health promoters -community workers -La Leche League Leaders -IBFAN representatives -health educators -nurse midwives <p>Participative methodologies, including:</p> <ul style="list-style-type: none"> - work in small groups - games - role plays - sociodramas <p>Interviews with mothers and families</p> <p>Review of research and readings</p> <p>Analysis of case studies</p>	<p>Identify the do's and don'ts of counseling.</p> <p>Observation of role play and actual counseling session.</p>
B. Support the mother and her family concerning BF	<ol style="list-style-type: none"> Myths, beliefs, and experiences of the mother, her family and her community regarding BF The influence of B.1 on the decision to BF Interpersonal and supporting relationships and their impact on the decision to BF a) role of the father Active listening techniques to facilitate understanding of the mothers' concerns The elements of informed choice Support for the mother who decides not to BF 	<p>B3: Savage King, pp. 136-48</p> <p>B3: Lawrence, pp. 196-7</p> <p>B6: Lawrence, pp. 197-9.</p>	<p>Discussion guides</p> <p>Flip charts</p> <p>Movies, videos</p> <p>Interview guides</p> <p>Informed choice forms</p>	<p>Given the following case: identify the community influences that most affected the decision to breastfeed.</p> <p>Analyze the influence of the community in the decision to BF at the family level.</p>	

Unit XIII. Interventions to Effect Change in Health-Care Service Delivery Systems

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Identify hospital practices that prevent an optimal level of BF	<ol style="list-style-type: none"> 1. Principles of health services administration 2. Hospital routines that prevent optimal BF practices <ol style="list-style-type: none"> a) separation of mother and child b) use of supplementary formula, water, teas c) free samples of formula d) delay of first BF e) use of bottles, pacifiers f) use of sedatives/ analgesia during childbirth, especially cesarean sections g) lack of knowledge about BF among the professional staff; mistaken and/or inappropriate advice h) lack of support for the BF mother 	<p>A1, A2: Saadeh, pp. 20-48</p> <p>A2: <i>Breastfeeding: Protecting a Natural Resource</i>, pp. 17-21</p> <p>A2c: Lawrence, pp. 24-7</p>	<p>Handouts on principles of administration and the change process</p> <p>Movies, videos</p> <p>Observation guide</p>	<p>Lectures and group discussions with health providers, including:</p> <ul style="list-style-type: none"> - social workers - nutritionist - pediatricians - administrators - nurses - obstetricians - gynecologists <p>Institutional observation</p> <p>Review of research and readings</p> <p>Small group work</p>	<p>Analyze the status of BF in the institution where you work, indicating the problems where you can effect change.</p>

Unit XIII. Interventions to Effect Change in Health-Care Service Delivery Systems (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. Identify the areas where health professionals can make changes	1. The role of the health professional as change agent a) how to recognize their field of influence and effectiveness b) how to put changes into effect	B1: Saadeh, pp. 30-8 B1: Rodriguez-Garcia R, Schaefer L and Yunes J, pp.189-200.			
C. Develop an appropriate strategy to make these changes in their work situation	1. Changes in routines to optimize BF practice a) mother and baby together to initiate bf from birth and continuing for several hours b) rooming-in c) no supplementation of any kind d)no use of bottles, pacifiers e) BF education classes for mothers, fathers, other family members, and hospital personnel 2. Identify barriers and facilitators of change	C1: Savage King, pp. 35-42 C1: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 16-21 C1: Lawrence, pp. 1-6 C1: Saadeh, pp. 30-48 C1: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 20 (Box)			Design a plan of action for putting necessary changes into effect.

Unit XIII. Interventions to Effect Change in Health-Care Service Delivery Systems (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
D. Promote BF at the institutional level so as to create a favorable environment for BF	<ol style="list-style-type: none"> Advantages of a multidisciplinary team in promoting and supporting BF The importance of a written BF policy that is understood, supported, and practiced by all personnel <ol style="list-style-type: none"> how to have input in the development of policies 	<p>D1: Lawrence, pp. 640-41</p> <p>D1: Saadeh, pp. 49-61</p> <p>D2: <i>Breastfeeding: Protecting a Natural Resource</i> pp. 24-6</p> <p>D2: Saadeh, pp. 20-48</p> <p>D2: <i>Breastfeeding: Protecting a Natural Resource</i>, pp. 20 (Box)</p>	Copies of the BF policies of various institutions, if available	Round-table discussions with: pediatricians, obstetricians, nurses, lactation consultants, nutritionists, psychologists, administrators, and social workers	<p>What is meant by “multidisciplinary team” in the promotion of BF? Why is it fundamental to the successful initiation and maintenance of BF?</p> <p>Analyze the BF policy of your hospital.</p>
E. Promote BF in all health care systems	<ol style="list-style-type: none"> Other points in postpartum/infant care when BF promotion and skills support are necessary Importance of consistent messages across sectors 		Brainstorm on what other health care facilities or services interact with reproductive age women, especially with those who may be pregnant or breastfeeding.		Name 5 other health sectors/sites that need to be supportive of BF.

Unit XIV. Breastfeeding Promotion at the Community and Societal Levels

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Identify socio-cultural and economic obstacles to successful BF practices	1. Urbanization and break-up of the family a) lack of family support b) lack of female role model for BF	A1: Savage King, pp. 1-2 A1: Lawrence, pp. 6-13		Review of research and readings Lectures by: -sociologists -psychologists -economists	
	2. The economic situation and the increasing number of women working outside the home a) separation of mother and child b) lack of support in the work site c) lack of support from health professionals d) lack of paternal and family support	A2: Lawrence, pp. 387-403 A2: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 22-6 A2: Saadeh, pp. 93-111	Statistical data Flipcharts Graphs, tables, diagrams	Group discussion and small group work with employers, fathers, community workers, and other children	Identify and analyze 2 sociocultural obstacles to BF in your work situation and their impact on the optimal breastfeeding practices.
	3. Image of the woman a) sexual b) maternal c) as a whole				

Unit XIV. Breastfeeding Promotion at the Community and Societal Levels (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. (cont.) Identify socio-cultural and economic obstacles to successful BF practices	<p>4. Influence of mass media and commercial propaganda on BF practices</p> <p>a) accurate information b) false information c) strategies to promote BF</p> <p>5. Promotion of the use of bottles and formula beginning in early childhood</p> <p>a) toys—dolls with sets of bottles b) bottles as baby gifts</p> <p>6. Societal perceptions of BF</p> <p>a) instinctual rather than learned process b) sexuality c) prolonged duration not normal or natural d) decreases mother's independence, ties her to baby e) compromises maternal nutrition</p>	<p>A4: <i>Breastfeeding: Protecting a Natural Resource</i> p. 21</p> <p>A4: Saadeh, pp. 75-92</p> <p>A4c: Savage King, pp. 165-7</p> <p>A6c: Lawrence, pp. 16-24</p>	<p>Posters, videos, movies, ads that give examples of messages</p> <p>Transparencies, slides</p>	<p>Evaluation of examples of messages being used</p> <p>Group discussion and small group work with communication specialists</p> <p>Sociodramas Toy marketing specialists</p> <p>Discussion of perceptions</p>	<p>What is the predominant message in the mass media regarding BF? What impact does this have?</p>

Unit XIV. Breastfeeding Promotion at the Community and Societal Levels (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
B. Identify socio-cultural and economic factors that facilitate and promote successful BF practices	1. Renewed interest in protection of natural resources			Lectures by policy makers Group discussion	In this country, what programs are being developed to support BF? Who is implementing them?
	2. Scientific validation of the value of BF				
	3. Need to decrease national debts and save foreign exchange	B3: <i>Breastfeeding: Protecting a Natural Resource</i> , p. 14			
	4. Increased interest and pride in traditional cultures and practices				
	5. Support of national and international organizations such as PAHO, WHO, and UNICEF for BF	B5: <i>Breastfeeding: Protecting a Natural Resource</i> pp. 16-21			Representative of PAHO or UNICEF
	6. National concern with increasing population				
	7. Labor laws that protect working BF mothers	B7: <i>Breastfeeding: Protecting a Natural Resource</i> , pp. 22-4	Legislation		Lectures by labor lawyers

Unit XIV. Breastfeeding Promotion at the Community and Societal Levels (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
C. Develop strategies appropriate to the actual situation in the community /region/ country for the promotion and support of BF	1. Strategies to promote BF a) needs assessment b) community education <ul style="list-style-type: none"> • women of child-bearing age • pregnant women • BF mothers • working mothers • spouses and families • community leaders • community health workers • health professionals • school age children and adolescents • the general public 	C: Saadeh, pp. 113-15 C1: <i>Guidelines: Breastfeeding, Family Planning, and the Lactational Amenorrhea Method-(LAM)</i> , pp. 15-17 C1b: Savage King, pp. 3-5	Materials from past and/or present BF promotion campaigns	Lectures by specialists in: - communications - community organization - political action - education Representatives and members of support groups such as La Leche League and IBFAN Founders and president of groups Practicum in the community	Develop a plan of community education directed at community leaders. Plan an educational session for adolescents What is the role of support groups in promoting BF?

Unit XIV. Breastfeeding Promotion at the Community and Societal Levels (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
<p>C. (cont.) Develop strategies appropriate to the actual situation in the community/region/country for the promotion and support of BF</p>	<p>1. (cont.) c) organization and formation of support groups</p> <ul style="list-style-type: none"> • identification of mothers' needs and interests • identification of formal and informal community leaders • possible organizational structures and functions • general mothers clubs vs. lactating mother-to-lactating mother clubs (e.g., La Leche League) 	<p>C1c: <i>Breastfeeding: Protecting a Natural Resource</i>, pp. 21-5</p>			

Unit XIV. Breastfeeding Promotion at the Community and Societal Levels (cont.)

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
<p>C. (cont.) Develop strategies appropriate to the actual situation in the community/region/country for the promotion and support of BF</p>	<p>1. (cont.) d) political action</p> <ul style="list-style-type: none"> • labor laws • International Code of Breastmilk Substitutes • national policies • structure and accessibility of health services • action by organized groups <ul style="list-style-type: none"> - in health - unions - agrarian e) diffusion of messages via mass media <ul style="list-style-type: none"> • principles • effectiveness • limitations 	<p>C1e: Saadeh, pp. 75-92</p>	<p>Presentations or lectures by</p> <ul style="list-style-type: none"> -lawyers -legislators -policy makers -administrators -union representatives <p>Workshop by communication specialist on development of messages and preparation of articles supporting and promoting BF for community newsletter, newspapers, bulletins</p>	<p>Presentation of radio and TV interviews about BF</p>	<p>Describe the labor laws that are necessary to protect BF.</p> <p>In your opinion, what would you add to the labor laws in this country to protect BF?</p> <p>If there are no laws, what are the most important problems that legislation should address in order to protect BF?</p> <p>Develop a radio spot directed towards spouses and families to promote BF.</p>

Unit XV. Evaluation of Breastfeeding Promotion Activities

Objectives	Core Content	References	Audiovisual/ Print Materials	Methodology and Resources	Evaluation Questions
A. Develop and implement a basic plan to evaluate BF promotion activities	1. Concepts regarding follow-up and evaluation of interventions	A1: Savage King, pp. 142-54	Transparencies and overhead projector Slides and projector	Lectures with specialists, including: -nursing faculty -service personnel Review of research and readings	
B. Establish and maintain a record system that allows for the follow-up and evaluation of interventions	1. Collection and recording of client and BF data a) types of information b) instruments for gathering information c) uses of information 2. Evaluation a) types b) instruments c) uses		Examples of record systems, data collection and follow-up forms	Exercises in the use of data collection forms	Design a form to collect information about the use of supplementary feedings by BF mothers in the community who received BF classes in the hospital after giving birth. How would this information be useful and/or used?
C. Participate in BF research	1. Principles of research a) types b) uses c) methodologies and implementation d) limitations e) suggested areas of study		Examples of different types of research studies Research guidelines	Small group work Review research reports	Discuss 2 research methodologies. Review and discuss the results of research as presented in professional publications.