Liberian Board for Nursing & Midwifery
Republic of Liberia

Competency-Based Curriculum
Post-Basic Bachelor of Science in Midwifery (BSc)

February 2019

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Mr. Humphrey Gibbs Loweal
Chairman
Liberian Board for Nursing and Midwifery

Introduction

Midwives and the care they provide are of utmost importance to society. Across Liberia, midwives are key professionals in ensuring that women have safe and emotionally satisfying experiences during pregnancy, childbirth and the postnatal period. The coming decade will present new challenges and opportunities for midwives to further develop their role as practitioners, partners and leaders in delivering high quality care and thus, shaping the future of maternity care in Liberia.

According to the World Health Organization (WHO), maternal mortality in Liberia remains one of the highest in the world at 1,072 per 100,000 live births. Around the world, midwives are being recognized for the quality care they provide and for the positive effects they have on communities when fully integrated and supported by the health care system.

In 2017, the LBNM commissioned a review and revision of the Post-Basic Midwifery BSc curriculum to develop a stronger vision for Liberian midwifery as we move towards a new decade that brings with it new challenges and modern solutions to existing healthcare problems. The process started with a review of the 2016 Task Analysis conducted by the United States Agency for International Development (USAID). In addition, an assessment of the curriculum's alignment to the International Confederation of Midwifes (ICM) Core Competencies was conducted. Based on the findings, the following goals emerged as key to a successful revision of the BSc curriculum:

1. Streamlining of the program by addressing redundancies between courses and prior midwifery educational programs, ultimately making the program more accessible to already practicing midwives.
2. Assuring the curriculum is evidence-based, remains in line with the ICM core competencies, continues to contribute to the United Nations Sustainable Development Goals (SDGs) as well as emphasizes the unique needs of Liberia.
3. Developing and implementing new teaching and learning tools that allow students and faculty to build upon the foundations created in their previous educational programs and in their experiences in the workforce.
4. Emphasizing the knowledge and skills needed to empower midwives to become leaders in their communities and institutions, including positions in management, administration, higher education, and research roles.

The curriculum revision was a collaborative endeavor with NYU Meyers College of Nursing and the Liberian Board for Nursing and Midwifery.

Rationale

The curriculum has been developed to serve as a standard tool for advancing midwives in the provision of quality midwifery and reproductive health care services. Upon completion, the midwife will receive a bachelor's degree. Midwifery licensure is unchanged.

Vision Statement

Envisage a competent and ethical midwife who contributes to the health system and the community for improved health outcomes for women, newborns, adolescents and their families.

Mission Statement

To prepare competent and ethical midwives who will become leaders in their communities and institutions, including positions in management, administration, higher education, and research roles.

Philosophy

The philosophy of midwifery education in Liberia is based on the concepts of client, health, midwifery, environment, and midwifery education. The program strives to prepare the midwife to have a strong knowledge base and excellent clinical decision making and skills.

Values of the graduate

Graduates will be compassionate listeners, respectful and committed workers, assertive leaders and knowledgeable and independent midwives. They will remain committed to lifelong learning and ongoing development of interpersonal skills and always be accountable, responsible and culturally sensitive.

Entry Requirements

Candidates for the BSc must:

- Be a Registered Midwife (RM) who holds a valid, current license from the LBNM
- Have practiced midwifery for at least one year

- Passed the challenge tests in five core midwifery courses administered by the institution which include: Medical/Surgical Nursing, Pediatric Nursing, Tropical and Communicable Diseases, OB/GYN and Psychiatric Nursing
- Submit a health certificate from an accredited hospital signed by a licensed doctor
- Must be indexed by LBNM

Program Goal

Provide a corridor for Registered Midwives to advance in their profession and be able to function independently and collaboratively as leaders, managers, administrators and educators within their scope of practice and deliver evidence-based midwifery care to adolescents, women, families and communities.

Program Objectives

Upon the completion of the BSc Midwifery Program, the graduate will be able to:

- Demonstrate skills in integrating midwifery theory, social sciences and evidence-based practice in planning, providing and evaluating care for women and their families.
- Provide competent and holistic care to clients in the hospital and in the community settings.
- Use available technology to advance evidence-based practice in midwifery.
- Work in a culturally diverse setting using ethical and moral standards.
- Demonstrate skills in health facility management.
- Teach in clinical settings, communities and midwifery training institutions.
- Apply leadership skills, political awareness and collaborative strategies in interacting with peers, colleagues, clients and communities.
- Seek opportunities to continue to advance one's education.
- Seek opportunities to advocate for further growth and development of the midwifery profession.
- Demonstrate responsibility and accountability in practice.
- Apply critical thinking in the provision of midwifery care.

Core Competencies

The ICM core competencies have been met by all students accepted into the BSc program as evidenced by their successful completion of an accredited RM program and

subsequent licensure by the LBNM. The clinical content areas that are addressed in the BSc curriculum include:

- Pathophysiology of the Reproductive System (including the male reproductive system)
- Advanced Pharmacology
- Embryology and Genetics

Requirements for Implementation

The LBNM recommends that all institutions desiring to implement this curriculum must meet the following standards:

- The educational philosophy and purpose of the school should be formulated and accepted by the faculty. It should be clearly stated and well defined as to the experiences offered to the students.
- Each member of the faculty should be well prepared in his or her specialized area.
- Engage in periodic assessment of the curriculum
- The institution should have adequate clinical resources including its physical facilities, variety of clinical specialties and the ability to provide simulation.
- The atmosphere should be conducive to teaching and learning.
- The library should be able to provide students and faculty with up to date learning/e-learning resources that allow for the ongoing development of evidence-based care.

Qualifications of Instructors/Clinical Preceptors

Institutions must follow the ICM Global Standards for Midwifery Education in the hiring of midwifery faculty and/or clinical preceptors and meet the requirements set forth in Section II of this document.

Teaching Methodology

Courses are taught utilizing a variety of methods including lectures, discussions, role play/simulations/Objective Structured Clinical Exams (OSCEs), case studies, practicums and community-based learning experiences.

Assessment Strategies

Students are evaluated using a variety of methods including quizzes/exams, written assignments/research papers, presentations/projects, Subjective Objective Assessment Planning (SOAP) notes and clinical evaluations.

Program Evaluation

All midwifery training programs operating in Liberia will be assessed and accredited prior to commencing the program and subsequently reassessed annually for quality assurance and are accredited every three years if it meets the accreditation assessment requirements. As a criterion for quality in health training institutions, students will be offered an opportunity to evaluate the quality of their education and instructors once a semester. Faculty peers and administrators conduct these evaluations twice yearly.

Acronym List

APA	American Psychological Association
BSc	Bachelor of Science
CM	Certified Midwife
CPD	Continuing Professional Development
DNA	Deoxyribonucleic Acid
G6PD	Glucose-6-Phosphate Dehydrogenase
HELLP	Hemolysis, Elevated Liver Enzymes and Low Platelet Count
HRSA	Health Resources and Services Administration
IC	Interstitial Cystitis
ICM	International Confederation of Midwives
ICN	International Council of Nurses
IEC	Information Education Communication
JHPIEGO	Johns Hopkins Program for International Education in Gynecology and Obstetrics
LBNM	Liberian Board for Nursing and Midwifery
LMA	Liberian Midwifery Association
LMDC	Liberian Medical and Dental Council
LNA	Liberian Nurses Association
MOH	Ministry of Health
NNRTI	Non-nucleoside Reverse-Transcriptase Inhibitors
NRTI	Nucleoside Reverse-Transcriptase Inhibitors
NYU Meyers	New York University Rory Meyers College of Nursing
OSCE	Objective Structured Clinical Examination
PCOS	Polycystic Ovarian Syndrome
PEPFAR	The United States President's Emergency Plan for AIDS Relief
PID Pelvic	Inflammatory Disease
PMTCT	Prevention of Mother-To-Child Transmission
PrEP	Pre-exposure Prophylaxis
PTU	Propylthiouracil
QSEN	Quality and Safety Education for Nurses
RH	Reproductive Health
RM	Registered Midwife
RNA	Ribonucleic Acid
SBCC	Social and Behavior Change Communication
SOAP	Subjective, Objective, Assessment, Plan
SSRI	Selective serotonin reuptake inhibitor
STI	Sexually Transmitted Infection

TCA	Tricyclic antidepressant
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
UTI	Urinary Tract Infection
WAHO	West African Health Organization
WACN	West African College of Nursing
WAPMC	West African Postgraduate Medical Colleges
WHO	World Health Organization

Program Sequence

Sequencing

Year 1 Semester 1				Year 1 Semester 2		
Courses	**Credits**	**Theory**	**Clinical**	**Courses**	**Credits**	**Theory**
English II	3	42		Sophomore English	3	42
Pathophysiology of the Reproductive System	3	42	112	Statistics	3	42
Midwifery Administration: Management and Leadership	3	42		Teaching Methodology	3	42
Total	**9**	**126**	**112**	Advanced Pharmacology	3	42
				Total	**12**	**168**

Year 2 Semester 1			Year 2 Semester 2			
Courses	**Credits**	**Theory**	**Courses**	**Credits**	**Theory**	**Practicum**
Research Methods	3	42	Senior Seminar/Practicum	6	15	224
Embryology & Genetics	3	42	**Total**	**6**	**15**	**224**
Developmental Psychology	3	42				
Professional Issues in Midwifery	3	42				
Total	**12**	**168**				

Credit Calculations based on 14 instructional weeks
1 didactic hour per week = 1 credit hour
3 clinical (including lab) hours per week = 1 credit hour

English II

Credits: 3

Placement within the Curriculum:

Year 1, Semester 1

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours

Prerequisites:

NA

Course Description:

This course is a continuation of Freshman English I that helps to reinforce the skills acquired in the preceding part. In addition, it provides instruction in the writing of original compositions such narration, description, and exposition, as well as in reading comprehension. The student is introduced to poetry and short-story as literary genres and builds proficiency in examining and interpreting literary selections.

Course Outcomes:

At the end of the course, the student will be able to:

- Develop and use skills in written language that is clear and coherent to meet accepted standards of grammar, diction, and mechanics
- Use skills acquired to adequately develop and organized writing
- Use skills acquired in reading comprehension to evaluate, formulate, and synthesize ideas
- Use basic skills necessary to examine, evaluate, and discuss issues and concepts
- Use necessary skills acquired to read, analyze, and appreciate prose (short-story) and poetry

- Write complete, concise and coherent sentences and paragraphs
- Analyze readings (short stories and poems) using appropriate literary terms to discuss the author's writing techniques
  Define and use correctly, the vocabulary or terms studied during the semester employing specific techniques of vocabulary development such as word analysis, contextual clues, and word origin

Course Content:

Unit I │ Functional Grammar

A. Overview of Functional Grammar
B. Grammar and Mechanics
    1. Common Grammatical Errors
    2. Problems of Mechanics
C. Using Verb Tense and the Sequence of Tense
D. Subject-Verb Agreement
E. Pronouns and Antecedents

Unit II │Organization in Writing

A. Sentence Structure and Meaning
    1. Expanding Basic Sentence Patterns
    2. Identifying Modifiers
    3. Coordination and Modification of Sentences
B. Paragraph Development
    1. The Sentence
    2. Unity, Coherence, and Order in Paragraph Development

Unit III │Major Types of Writing

A. Narration
B. Description
C. Exposition
D. Persuasion
E. Letter Writing
F. Memorandum

Unit IV │Introduction to Poetry

A. Types of Poetry
    1. Lyric
    2. Narrative
    3. Dramatic poems
B. The Speaker
C. Imagery
D. Diction
E. Figurative Language
F. Sound Patterns
    1. Structure
    2. Tone
1. Selected Poems

Unit V │Introduction to Prose

A. Elements of Fiction
B. Selected Short Stories

Unit VI │Review of Comprehension Skills (main ideas and supporting details)

Unit VII │ Vocabulary Development (vocabulary used in written and spoken English)

Unit VIII │Making Outlines (topic and sentence outlines)

Competencies:

Cognitive	Affective	Psychomotor
Uses skills acquired to adequately develop and organized writing	Accepts responsibility for communicating effectively through writing	Writes complete, concise and coherent sentences and paragraphs
Use skills acquired in reading comprehension to evaluate, formulate, and synthesize ideas	Demonstrates value for reading comprehension skills as means of communication	Evaluates written reports using skills in reading comprehension

Interprets differences in communication styles among patients and families, and members of the health team	Explains the role of each member of the health care team in the therapeutic relationship	Initiates the appropriate therapeutic communication techniques with patients, families and members of the health care team
Discusses effective strategies for communicating and resolving conflict	Shares conflict resolution strategies with other members of the health care team to ensure to ensure accountability during a conflict and proper resolution	Responds to conflicts in the health care environment through the use of effective communication

Teaching/Learning Strategies:

- Lectures/Discussions
- Individual and group assignments/presentations

Assessment Criteria – Standard Grading System:

- Attendance 5%
- Written Tests & Exams 50%
- Individual and Group Assignments/Presentations 25%
- Long Essays (individual projects) 20%

References:

Oberg, D. & Villemarie, L. (2018). Grammar and Writing Skills for the Health Professional. Cengage Learning, Boston, MA.

Pathophysiology of the Reproductive System

Credits: 3

Placement within the Curriculum:

Year 1, Semester 1

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours - class meets weekly 3-hours per week
112 clinical hours - students attend clinical weekly for 14w for one 8-hour session

Prerequisites:

NA

Course Description:

This course reviews the management process as it is applied to the pathologies of the female and male reproductive systems that may occur throughout the lifespan. Emphasis will be placed on both the cultural context in which these conditions occur as well as evidenced based management options, documentation and shared decision making. Students will spend one day per week in the clinical setting applying the knowledge and skills being attained in this course.

Course Outcomes:

By the end of the course, students will:

- Identify disorders of the female and male reproductive systems
- Implement the steps of the midwifery management process to assess, diagnose and treat clients experiencing acute and chronic conditions
- Provide counseling on the prevention of selected conditions
- Implement strategies that will inspire clients to take an active role in their healthcare
- Assess management plans for accuracy and assure that they are grounded in evidence
- Document care thoroughly yet concisely using SOAP format

Competencies:

Knowledge	Attitude/Value	Skill
Identifies disorders of the reproductive system	Provides optimal comfort to clients seeking care for disorders of the reproductive tract	Uses proper technique when performing exams of the reproductive system, particularly on women suffering from disorders of the reproductive tract
Implements the midwifery management process to optimize the assessment, diagnosis and treatment of clients	Values the importance of systematic evaluation for accuracy and completeness of care	Documents the steps of the midwifery management process in the form of a SOAP note
Provides counseling to clients regarding their treatment plan	Supports clients in taking an active role in their healthcare	Uses effective therapeutic communication strategies in the counseling of clients
Identify evidence-based strategies in the care of clients suffering from disorders of the reproductive system	Recommends evidence-based management strategies to clients	Performs literature review on selected conditions to improve evidence-base
Considers the client's social, cultural and economic context when providing care	Recognizes the client's autonomy in selecting an appropriate care plan based on her unique circumstances	

Course Content:

Unit I │ Menstrual Cycle Disorders

A. Amenorrhea
    1. Primary
    2. Secondary
B. Dysmenorrhea
    1. Primary
    2. Secondary
C. Heavy Menstrual Bleeding (menorrhagia)
D. Irregular Menses (metorrhagia)
E. Scant or Infrequent Menses (oligomenorrhea)
F. Polycystic Ovarian Syndrome (PCOS)

Unit II │ Abdominal/Pelvic Pain

A. Pregnancy Complications
    1. Ectopic Pregnancy
    2. Hydatiform Mole:
        a) Partial
        b) Complete
    3. Miscarriage:
        a) Spontaneous
        b) Missed
        c) Incomplete
B. Ovarian Cysts (see pelvic masses)
    1. Torsion
C. Pelvic Inflammatory Disease
    1. STIs, as they Relate to Pelvic Inflammatory Disease (PID)
D. Vulvar Pain (Dyspareunia)
    1. Vulvodynia
    2. Endometriosis
    3. Atrophic Vaginitis

Unit III │ Pelvic Masses

A. Fibroids
B. Adenomyosis
C. Cysts
    1. Follicular
    2. Corpus Luteum
    3. Dermoid

Unit IV │ Non-Gynecologic Causes (related/part of differential diagnosis)

A. Appendicitis
B. Urinary Tract Infection (UTI)
C. Interstitial Cystitis (IC)

Unit V │ Congenital Uterine Anomalies

A. Septate

B. Bicornuate
C. Unicornuate
D. Didelphus

Unit VI │ Pelvic Floor Disorders

A. Pelvic Organ Prolapse
    1. Cystocele
    2. Rectocele
    3. Uterine Prolapse
B. Urinary Incontinence
    1. Stress
    2. Urge
    3. Mixed
C. Fistulas

Unit VII │ Cancer

A. Vulvar
B. Cervical
C. Uterine/Endometrial
D. Ovarian
E. Breast

Unit VIII │ Male Anatomical Structures ****State the function of the following****

A. Penis
    1. Corpus Cavernosum
    2. Corpus Spongiosum
    3. Glands Penis
    4. Prepuce
B. Urethra
C. Bulbourethral Glands
D. Testicle
E. Epididymis
F. Vas Deferens
G. Seminal Vesicle
H. Prostate Gland

Unit IX │ Male Pathophysiology

A. Erectile Dysfunction
B. Hypogonadism
C. Cryptorchidism (undescended testicle)
D. Pituitary Tumors
E. Ambiguous Genitalia
F. Testicular Torsion
G. Varicoceles
H. Gynecomastia
I. Cancers
    1. Testicular
    2. Penile
    3. Prostate
    4. Breast
J. Sexually Transmitted Infections
    1. Types of Infections
        a) Prostatitis
        b) Urethritis
        c) Epididymitis
        d) Orchitis
    2. Factors Effecting Transmission Rates
        a) Circumcision
        b) Condoms
        c) Pre-exposure Prophylaxis (PrEP)
K. Benign Prostatic Hyperplasia
L. Androgen Deficiency
    1. Related Chronic Health Conditions
M. Fertility
    1. Effects of Aging
    2. Environmental Toxins
    3. Malnutrition
N. Genetic Defects in Offspring
O. Semen Analysis
    1. Volume
    2. Count
    3. Motility
    4. Morphology
    5. Elevated WBCs in sample

P. Birth Control
    1. Vasectomy

Teaching/Learning Strategies:

- Lecture
- Discussion
- Simulation
- Written assignments
- Individual and group presentations

Assessment Criteria – Standard Grading System:

• Attendance	5%
• Quizzes	15%
• Midterm Exam	25%
• SOAP Notes (submit one note per clinical session)	25%
• Final Exam	30%
• Midterm Clinical Evaluation (satisfactory/unsatisfactory)	
• Final Clinical Evaluation (satisfactory/unsatisfactory)	

References:

Heffner, L. & Schust, D. (2014). *The Reproductive System at a Glance, 4th ed.* West Sussex, UK: John Wiley & Sons.

King, T., Brucker, M., Jevitt, C. & Osborne, K. (2019). *Varney's Midwifery, 6th ed.* Burlington, MA: Jones and Bartlett.

Ministry of Health. (2017). *National Standard Therapeutic Guidelines and Essential Medicines List, 2nd ed*. Monrovia, Liberia

U.S. National Library of Medicine: Medline Plus. (2015). Retrieved from: https://medlineplus.gov/malereproductivesystem.html

The Midwifery Management Process, Varney's Midwifery

Steps:

1. Investigate by obtaining all necessary data for complete evaluation of the woman or newborn.
2. Make an accurate identification of problems or diagnoses and healthcare needs based on correct interpretation of data.
3. Anticipate other potential problems or diagnoses that might be expected because of the identified problems or diagnoses.
4. Evaluate the need for immediate midwife of physician intervention and/or for consultation or collaborative management with other healthcare team members, as dictated by the condition of the woman or newborn.
5. Develop a comprehensive plan of care that is supported by explanations of valid rationale underlying the decisions made and is based on preceding steps.
6. Assume responsibility for the efficient and safe implementation of the plan of care.
7. Evaluate the effectiveness of the care given, recycling appropriately thought the management process for any aspect of care that has been ineffective.
(King, T., Brucker, M., Jevitt, C. & Osborne, K., 2019)

Let's simplify this a bit.
1. Collection of subjective and objective data including laboratory and imaging that has been done or that will be done.

Ex. A woman presents with severe pelvic pain. She has cervical motion tenderness (+CMT) on bimanual examination and abundant, foul smelling vaginal discharge. The midwife collects vaginal cultures for gonorrhea and chlamydia.

2. Create a differential diagnosis and use all available evidence from step one to assure accuracy.

Ex. By her presentation you think of all of the causes of pelvic pain (II. Weeks 3-4 of syllabus). After an examination is performed, the midwife rules out many of them because her pregnancy test is negative and there were no masses palpable on examination. In addition +CMT and discharge were noted.

3. This one is pretty straightforward so let's take the example here as well.

Ex. The midwife diagnoses a woman with pelvic inflammatory disease (PID). Her partner will need to be treated as well or she is likely to get reinfected. Furthermore, severe and/or untreated PID can cause tubal scarring increasing chances of ectopic pregnancy should pregnancy occur.

4. Consider the severity of her condition?

Ex. Does she require immediate emergency care, is she febrile, appear septic? Or is she stable and can be treated outpatient?

5. A plan of care must be evidence based. It is more than pharmacological treatment and nearly always involves education and emotional support. Occasionally, the plan will involve further testing or a follow up visit.

Ex.
1) She is given antibiotics (ex. Ceftriaxone 250 mg IM x 1 dose, doxycycline 100mg PO BID x14d and Metronidazole 500 mg PO BID x 14d.)
2) Reassess pt tomorrow and bring partner for treatment.
3) Counseling on STI prevention provided
4) Screened for intimate partner violence, resources provided.

6. Self-explanatory. Midwives are independently licensed practitioners in Liberia and are responsible for the care of clients. It is the midwife's professional responsibility to know when to care for a client independently vs when to consult, collaborate or refer.

Ex. In this case, independent management was reasonable and the midwife has arranged for very close follow up and strict instructions should her condition worsen overnight.

7. Continuously evaluate the care you have provided.

Ex. Setting up a follow up for this client for the next day provides an opportunity to reevaluate your care.

SOAP Note Template

Subjective: What the patient tells you, symptoms, chief complaint, review of systems.
Objective: Physical exam findings (include diagrams that were drawn to explain location and size of lesions) laboratory or diagnostic test results.
Assessment: This is your analysis or interpretation of results.
Plan: Patient education, changes in medications, needed tests, referrals or return visits. Include the patient's response to the plan.

****Additional components required for SOAP notes that are written and submitted for a grade in a clinical course****

Following your standard SOAP note please include a reflection that includes the following:
1. Personal thoughts and feelings about this particular clinical encounter.
2. What did you do well?
3. What will you improve upon?
4. How will this encounter shape your future encounters?
5. What did you offer this client to improve her experience?
6. How did you show compassion in this encounter?

****To accurately complete numbers 5 and 6, you will need to familiarize yourself with the ICM position statement entitled Partnership Between Women and Midwives https://www.internationalmidwives.org/assets/files/statement-files/2018/04/eng-partnership-between-women-and-midwives1.pdf to show how your practice reflects this value.****

Sample SOAP Note for Primary Care Client (Bates, 12th ed.)

9/25/16
S: Mrs. N. returns for follow-up of her migraine headaches. She has had fewer headaches since reducing her intake of caffeine. She is now drinking decaffeinated coffee and has stopped drinking tea. She has joined a support group and started exercising to reduce stress. She is still having one to two headaches a month with some nausea, but they are less severe and generally relieved with NSAIDs. She denies any fever, stiff neck, associated visual changes, motor-sensory deficits, or paresthesias.

She has been checking her blood pressure at home. It is running about 150/90. She is walking 30 minutes three times a week in her neighborhood and has reduced her daily

caloric intake. She has been unable to stop smoking. She has been doing the Kegel exercises, but still has some leakage with coughing or laughing.
Medications: Motrin 400 mg up to three times daily as needed for headache.
Allergies: Ampicillin causes rash.
Tobacco: 1 pack per day since age 18 years.

O: Pleasant, overweight, middle-aged woman, who is animated and somewhat tense. Ht 157 cm (5′ 2″). Wt 63 kg (140 lbs). BMI 26. BP 150/90. HR 86 and regular. RR 16. Afebrile.
Skin: No suspicious nevi.
HEENT: Normocephalic, atraumatic. Pharynx without exudates.
Neck: Supple, without thyromegaly.
Lymph nodes: No lymphadenopathy.
Lungs: Resonant and clear.
***CV*:** JVP 6 cm above the right atrium; carotid upstrokes brisk, no bruits. Good S_1, S_2. No murmurs heard today. No S_3, S_4.
Abdomen: Active bowel sounds. Soft, nontender, no hepatosplenomegaly.
Extremities: Without edema.
Labs: Basic metabolic panel and urinalysis from 8/25/16 unremarkable. Pap smear normal.
A/P:

1. Migraine headaches—now down to one to two per month due to reductions in caffeinated beverages and stress. Headaches are responding to NSAIDs.
   -Will defer daily prophylactic medication for now because patient is having fewer than three headaches per month and feels better.
   -Affirm need to stop smoking and to continue exercise program.
   -Affirm patient's participation in support group to reduce stress.
2. Elevated blood pressure—BP remains elevated at 150/90.
   -Will initiate therapy with a diuretic.
   -Patient to take blood pressure three times a week at home and bring recordings to next office visit.
3. Cystocele with occasional stress incontinence—stress incontinence improved with Kegel exercises but still with some urine leakage. Urinalysis from last visit—no infection.
   -Initiate vaginal estrogen cream.
   -Continue Kegel exercises.
4. Overweight—has lost ~4 lbs.
   -Continue exercise.
   -Review diet history; affirm weight reduction.

5. Family stress—patient handling this better. See Plans above.
6. Occasional low back pain—no complaints today.
7. Tobacco abuse—see Plans above. Will start medication.
8. Health maintenance—Pap smear sent last visit. Mammogram scheduled. Colonoscopy recommended.

Additional Considerations for Pregnant Clients

S: Fetal movement, contractions, symptoms of preterm labor (frequent tightening, pressure, menstrual like cramping), vaginal bleeding, discharge, loss of fluid. Symptoms of preeclampsia (headache, visual changes, heartburn, nausea/vomiting). Adequate fluid and caloric intake? Taking vitamins, iron as advised?
O: Document the following as appropriate based on gestational age:
Uterine size: noted on bimanual exam up to 12w
Fundal height: noted at pubic symphysis or umbilicus by number of finger breaths above or below, OR in centimeters after 20 weeks by using measuring tape
Fetal position as noted on Leopold's maneuver
Fetal size: EFW
Fetal heart rate: Location, rate and rhythm
Uterine tone: soft vs rigid
If vaginal exam is done: dilation, effacement, station and presenting part. May write LCP which stands for long closed and posterior if exam findings are negative. If there is any cervical ripening, dilation or effacing noted, document like this (1, 50%, -2, vtx) which means 1cm dilated, 50% effaced, -2 station, vertex presentation.
Deep tendon reflexes (0 to +4), edema (0-4, pitting?), pulses (equal), calf circumference (difference >3cms is concerning for DVT).

Sample SOAP Note for Return OB Visit

S: 25 yo, G3 P 1011 at 34w. Feels well, no complaints. Occasional Braxton Hicks Contractions (*Occ BH).* Denies vaginal bleeding or leakage of fluid *(VB or LOF)*. Report positive fetal movement *(+FM)*. Denies headache *(HA)*, visual changes, heartburn, right upper quadrant *(RUQ)* pain, swelling of hands or face. Nervous about labor but looking forward to birth of baby.
O: BP 120/70
Fundal height 33cms
Fetus VTX by Leopold's Maneuver, VTX presentation, floating head.
FH: auscultated in left lower quadrant *(LLQ)* Rate: 130-135, regular rhythm, no decelerations noted.

+1 edema, no pitting.
A: Pregnancy progressing well, Size equals dates *(S=D)*
P: Reviewed normal changes in the third trimester, signs and symptoms of preterm labor and preeclampsia and when to come to hospital. Continue monitoring for fetal movement. Review when to come to hospital. Return to clinic in 2w.

Conditions Chart

For each condition listed on the course syllabus, complete the following chart:
Name of condition: _____

Etiology	Presentation	Physical Exam Findings	Burden of Disease	Differential Diagnosis	Treatment/ Comfort measures/cultural considerations

Midwifery Administration: Leadership and Management

Credits: 3

Placement within the Curriculum:

Year 1, Semester 1

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours

Prerequisites:

NA

Course Description:

This course focuses on the professional role of the midwife as a collaborator, leader, manager and provider of care with midwifery colleagues and other members of the inter-professional health care team, and within the context of complex health care systems. This course includes leadership and management principles of organizations and power, interprofessional team communication, delegation, prioritization, conflict management, quality and safety, creating a healthy work environment, and advocacy.
The use of Quality and Safety Education for Nurses (QSEN) competencies, to support evidence-based leadership and management, will include Patient-centered Care, Teamwork and Collaboration, Evidence-based Practice, Quality Improvement, Safety, and informatics.

Course Outcomes:

- At the end of this course the student will be able to:
- Apply leadership concepts, skills, and decision making in the provision of high-quality midwifery care, healthcare team coordination, and the oversight and accountability for care delivery in a variety of settings.
- Demonstrate a basic understanding of organizational structure, mission, vision, philosophy, and values.

- Demonstrate an understanding of the process for how midwifery and related healthcare quality and safety measures are developed, validated, and endorsed.
- Evaluate data from all relevant sources, including technology, to inform the delivery of care.
- Demonstrate basic knowledge of healthcare policy, finance, and regulatory environments, including local, regional, national, and global healthcare trends.
- Use inter- and intra-professional communication and collaborative skills to deliver evidence-based, client-centered care.

Competencies:

Knowledge	Attitudes/Values	Skills
Recognize the patient or designee shall determine the processes and structure of the care which matters.	Value patient's ability to recognize and express their needs to others	Navigate with the patient or designee as the center of health and healthcare team navigation to meet patient preferences and expressed needs
Describe scopes of practice and how each member of team demonstrates accountability for performance	Value the midwife's contribution to an effective and highly functional team	Collaborate and communicate with all members of the health care team, acknowledging the patient is the center of the team
Demonstrate ability to bring evidence of best practices to the bedside and clinical unit	Value need for ethical conduct and quality improvement	Question rationale for routine approaches that result in less-than-desired outcomes.
Explain the importance of variation and measurement in assessing quality of care	Appreciate that continuous quality improvement is an essential part of the daily work of all health professionals	Use tools (such as flow charts, cause-effect diagrams) to make processes of care explicit
Examine human factors and other basic safety design principles as well as commonly used unsafe practices	Value the contributions of standardization/reliability to safety	Demonstrate effective use of strategies to reduce risk of harm to self or others
Explain why information and technology skills are essential for safe patient care	Value technologies that support clinical decision-making, error prevention, and care coordination	Document and plan patient care in an electronic (or other approved) health record according to institutional standards

Course Content:

Unit I │ Core Competencies for Midwifery Leadership and Management

A. Midwives as Leaders and Managers for Safe, High-Quality Patient Care
B. What Makes a High-Reliability Organization?
C. Styles of Leadership
D. Structural Empowerment
E. Exemplary Professional Practice
F. New Knowledge, Innovation, and Improvements
G. Empirical Quality Results
H. Legal and Ethical Aspects of Midwifery
I. Delegation and Setting Priorities

Unit II │ Managing Resources

A. Budgeting
B. Recruiting and Selecting Staff
C. Scheduling
D. Staff Motivation and Development
E. Evaluating Staff Performance
F. Feedback, Coaching, Disciplining, and Terminating Staff
G. Managing Absenteeism, Reducing Turnover, Retaining Staff
H. Dealing with Disruptive Staff Problems
I. Preparing for Emergencies
J. Preventing Workplace Violence
K. Handling Collective Bargaining Issues

Unit III │ Quality and Safety Concepts for Midwifery Leaders and Managers

A. Patient-Centered Care
B. Interprofessional Teamwork and Collaboration
C. Informatics
D. Basic Literature Search Strategies
E. Evidence-based Practice
F. Patient Safety

Unit IV │ Midwifery Leadership and Management for Quality Improvement

A. Essentials of Quality Improvement
B. Tools of Quality Improvement
C. Quality Improvement and Project Management
D. Future Role of Midwife in Patient Safety and Quality
E. Transition from clinical midwifery to Leadership and Management Roles

Teaching/Learning Strategies:

- Lectures
- Classroom Presentations
- Role Plays/Simulation
- Case Studies
- Demonstration
- Coaching
- Reflective Practice Journals
- Homework/Pre-Class or Pre-Clinical Assignments

Course Expectations:

- Regular classroom and clinical session attendance
- Come to class prepared having completed all homework and reading assignments
- Participate actively in class and skills laboratory sessions
- Complete all assignments and examinations on due dates

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Midterm Exam 25%
- Final Exam 40%

References:

American Nurses Credentialing Center. (n.d). Magnet Model. Retrieved from https://www.nursingworld.org/organizational-programs/magnet/magnet-model/

Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., Sullivan D.,…Warren, J. (2007). Quality and safety education for nurses. *Nursing Outlook, 55*(3), 122-131. doi:10.1016/j.outlook.2007.02.006

Kelly, P., Vottero, B., & Christie-McAulliffe, C. (2018), *Introduction to quality and safety education for nurses: Core competencies for nursing leadership and management*, 2nd ed. NY, NY: Springer Publishing.

Sullivan, E. (2018). *Effective leadership and management in nursing*, 9th ed. NY, NY: Pearson

Sophomore English

Credits: 3

Placement within the Curriculum:

Year 1, Semester 2

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours

Prerequisites:

English II, Pathophysiology of the Reproductive System, and Midwifery Administration: Management and Leadership

Course Description:

The primary purpose of this course is to help the student gain meaningful understanding of the central elements and steps in writing a research paper. The course emphasizes the relationship among data, theory, and knowledge in an applied perspective and the practice of research and theory in academic settings. The student will be equipped with appropriate knowledge/skills in the documentation and presentation of research findings.

Course Outcomes:

At the end of this course, the student will be able to:

- Develop complete sentences
- Use modifiers correctly when constructing sentences
- Develop and limit research topics
- Develop a thesis statement
- Use the library and world wide web in the conduct of a research study
- Write and present research paper findings

Course Content:

Unit I │Sentence Development

A. Writing Complete Sentences by Structure
B. Combining Sentences (subordination and coordination)
C. Use of Modifiers (misplaced and dangling)
D. Developing Paragraphs

Unit II │Research Process

A. Research Topic
    1. Selecting the Topic
    2. Limiting the Topic
B. Planning the Paper
    1. Gathering Information (library/world wide web)
    2. Taking Notes
C. Writing the Paper
    1. Organizing Notes and Writing the Paper
    2. Using Method and Format Documentation
    3. Evaluating and Revising the Paper
D. Bibliography and References
E. Proof-reading and Publishing the Research Paper

Competencies:

Cognitive	Affective	Psychomotor
Uses skills acquired to adequately develop and organized writing	Accepts responsibility for communicating effectively through writing	Writes complete, concise and coherent sentences and paragraphs
Use skills acquired in reading comprehension to evaluate, formulate, and synthesize ideas	Demonstrates value for reading comprehension skills as means of communication	Evaluates written reports using skills in reading comprehension
Interprets differences in communication styles among patients and families, and members of the health team	Explains the role of each member of the health care team in the therapeutic relationship	Initiates the appropriate therapeutic communication techniques with patients, families and members of the health care

		team
Discusses effective strategies for communicating and resolving conflict	Shares conflict resolution strategies with other members of the health care team to ensure to ensure accountability during a conflict and proper resolution	Responds to conflicts in the health care environment through the use of effective communication
Critiques research reports and documentations	Discusses research reports with peers and instructor	
Prepares research reports	Shares reports with peers and instructors	Revises research reports

Teaching/Learning Strategies:

- Lectures/Discussions
- Individual and group assignments/presentations

Assessments/Evaluation Criteria:

- Attendance 5%
- Written Tests & Exams 50%
- Individual and Group Assignments/Presentations 25%
- Long Essays (individual projects) 20%

References:

Oberg, D. & Villemarie, L. (2018). Grammar and Writing Skills for the Health Professional. Cengage Learning, Boston, MA.

Statistics

Note: Course syllabus to be developed by a collaborative working group of teaching institutions.

Credits: 3

Placement within the Curriculum:

Year 1, Semester 2

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours

Prerequisites:

English II, Pathophysiology of the Reproductive System, and Midwifery Administration: Management and Leadership

Course Description:

Course Outcomes:

Competencies:

Course Content:

Teaching/Learning Strategies:

Course Expectations:

Assessment Criteria – Standard Grading System:

Required Texts:

References:

Teaching Methodology

Credits: 3

Placement within the Curriculum:

Year 1, Semester 2

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours - Class meets once per week for 3h

Prerequisites:

English II, Pathophysiology of the Reproductive System, and Midwifery Administration: Management and Leadership

Course Description:

This course provides a foundation in teaching and learning that includes the learning theories, principles of adult education, effective teaching strategies, classroom management techniques and evaluation. The student will learn how to conduct learning needs assessments, write course outcomes, do lesson planning, and conduct formative and summative evaluation.

Course Outcomes:

At the end of this course the student will be able to:

- Apply learning theories in teaching midwifery.
- Develop a lesson plan consistent with sound, effective teaching practices.
- Demonstrate effective teaching strategies that motivate and engage students.
- Apply the principles of clinical teaching.
- Develop test questions and clinical performance evaluation tools aligned with course outcomes/objectives.
- Develop a strategic plan to effect and manage change to improve patient care.
- Apply the principles of effective health education to individuals, family and community.

Competencies:

Knowledge	Attitudes/Values	Skills
Describe the learning theories and their application in teaching.	Appreciate the need for theoretical concepts in implementing education practices.	Apply learning theories in teaching.
Describe the process of developing a lesson plan.	Value the need for structured lesson planning to meet learning outcomes/objectives	Develop a lesson plan consistent with sound, effective teaching practices.
Articulate the processes that lead to effective facilitation of learning.	Appreciate the role of the midwife in facilitating learning.	Demonstrate effective teaching strategies that motivate and engage students.
Describe the principles and mechanics of effective clinical teaching in midwifery.	Value the need for effective clinical teaching in midwifery.	Demonstrate effective clinical teaching.
Describe the evaluation processes in assessing learning.	Appreciate the importance of effective evaluation in learning.	Develop test items/questions consistent with effective evaluation of Bloom's taxonomy.
Describe the process of evaluating students in the clinical setting.	Appreciate the importance of applying didactic learning to the clinical setting.	Evaluate clinical performance of students.
Discuss the role of the midwife in effecting and managing change.	Value the midwife role in effecting and managing change.	Develop a strategic plan to implement change to improve patient care.
Explain how the midwife can deliver effective health education.	Value how health education leads to positive changes in individuals, families, communities and national health.	Apply the principles of effective health teaching to individual, family or community.

Course Content:

Unit I │ Introduction to Midwifery Education

A. Selected Learning Theories
   1. Behaviorism
   2. Constructivism
   3. Experiential Learning
   4. Adult Learning Theories

B. Learning Styles
    1. Visual
    2. Auditory
    3. Kinesthetic
C. Bloom's Taxonomy of Learning
    1. Knowledge
    2. Comprehension
    3. Application
    4. Analysis
    5. Synthesis
    6. Evaluation

Unit II │ Competencies in Teaching

A. Facilitate Learning
    1. Assessment of Learning Needs - The Learning Gap
    2. Developing Learning Outcomes and Objectives
    3. Identifying Content in Alignment with Outcomes/Objectives:
        a) Breaking down difficult concepts
        b) Leveling of complexities of content
    4. Selecting Instructional Strategies:
        a) Motivating students:
            (1) Gaming
            (2) Use of incentives/rewards/grades
        b) Participatory learning/student:
            (1) Interactive didactive lecture/presentation
            (2) Discussion
            (3) Study trips
            (4) Panel discussion
            (5) Group work
        c) Deep learning:
            (1) Brainstorming
            (2) Reflection/Journaling
            (3) Writing exercises
            (4) Individual/group reports

        d) Drilling knowledge:
            (1) Gaming
            (2) Q&A

e) Use of technology to enhance learning:
(1) Videos
(2) Internet
(3) Slides
(4) High fidelity manikins
f) Teaching psychomotor skills:
(1) Simulation
(2) Skills demonstration
g) Clinical teaching

B. Assessment and Evaluation Strategies
1. Formative:
a) Classroom assessment techniques
b) Skills development
2. Summative:
a) Quizzes
b) Assignments
c) Objective structured clinical examinations (OSCE)
3. Clinical Evaluation:
a) Clinical performance assessment
b) Giving feedback
4. Test Construction:
a) Writing multiple choice items
b) Writing other types of tests:
(1) True/false
(2) Matching list
(3) Fill in the blank
(4) Essay
(5) Short answer

C. Clinical Teaching
1. Role of the Clinical Teacher:
a) Information provider
b) Experience planner and resource
c) Role model
d) Facilitator
2. Theories of Clinical Teaching:
a) Theories of adult learning
b) Experiential learning
c) Bandura'social cognitive learning:
(1) Sources of self-efficacy:

i. Mastery experience
ii. Observation of others
iii. Verbal persuasion
iv. Physiologic/emotional components

3. Stages of Clinical Learning:
    a) Unconsciously incompetent
    b) Consciously incompetent
    c) Consciously competent
    d) Unconsciously competent
4. Clinical Teaching Modalities:
    a) Direct instruction
    b) Modeling
    c) Coaching
    d) Facilitating
    e) Clinical preceptorships
5. Challenges of Clinical Teaching:
    a) Time constraints
    b) Space
    c) Environmental factors
    d) Finding a balance between learning and patient safety
    e) Challenges in patient care
    f) Student factors (lack of preparation, anxiety, etc.)
6. Effective Teaching:
    a) Assessment of learning gap and student capabilities
    b) Provide orientation to the clinical unit/ward
    c) Effective communication with staff and patient/families
    d) Appropriate assignment at student level
    e) Adequate preparation of basic skills before clinical
    f) Effective briefing and debriefing
    g) Act as a role model
    h) Timely feedback
    i) Timely intervention
    j) Encourage student self-reflection
    k) Identify teaching moments and use them effectively

D. The Midwife as a Change Agent and Leader:
1. Managing Change
2. Preparing for Change
3. Lewin's Change Theory:
    a) Unfreeze (ready to change)

b) Change (implementation)
c) Freeze (making it stick)

4. Kotter Process of Change:
    a) Create a sense of urgency
    b) Build a guiding coalition
    c) Form a strategic plan
    d) Enlist volunteer early adopters
    e) Enable action by removing barriers
    f) Generate short-term wins
    g) Sustain acceleration
    h) Institute change

Unit III │ Health education/Social and Behavior Change Communication (SBCC) & Information Communication Education (IEC)

A. What is Health Education – The WHO Concept
B. The Issue of Health Literacy
C. Issue of Non-Adherence
D. Importance of Health Education
    1. Improves Health Status of Individuals, Families, Communities and the Nation
    2. Enhances the Quality of Life for All People
    3. Reduces Premature Deaths
    4. Focus on Prevention and Health Maintenance
    5. Reduces Health Care Costs
E. Where Health Education is Employed
    1. Schools
    2. College/University Campuses
    3. Companies
    4. Health Care Settings: Hospitals, Clinics, Health Centers
    5. Churches, Town Halls
    6. Mass Media
F. Health Education Strategies
    1. Participation of the Target Population
    2. Completion of community needs assessment to identify community capacity, resources, priorities and needs
    3. Planned learning activities

4. Implementation of programs with integrated, well-planned curricula and materials that take place in a setting convenient for participants
5. Presentation of information with audiovisual and computer-based technologies
6. Ensuring proficiency of program staff through training to maintain fidelity to the program model

Teaching/Learning Strategies:

- Interactive classroom lecture/discussion
- Small group discussion
- Seminars
- Classroom presentation
- Teaching demonstration
- Practice teaching (teaching practicum)

Assessment Criteria – Standard Grading System:

- Quizzes 15%
- Assignments 15%
- Attendance 5%
- Mid-term Exam 25%
- Final exam 40%
- Practicum Pass/Fail

References:

JHPIEGO. (2012). *Effective Teaching Skills: A Blended Learning Approach*. Baltimore: MD, JHPIEGO.

WHO, JHPIEGO. (2005). *Effective Teaching: A Guide for Educating Healthcare Providers Reference Manual.* Geneva: Switzerland, JHPIEGO.

Advanced Pharmacology

Credits: 3

Placement within the Curriculum:

Year 1, Semester 2

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours - class meets weekly for one 3-hour session

Prerequisites:

English II, Pathophysiology of the Reproductive System, and Midwifery Administration: Management and Leadership

Course Description:

This course is designed to meet the educational requirements for midwives who are seeking endorsement as Bachelor's prepared Registered Midwives. The course builds on the student's background as a Registered Midwife (RM) and prepares the student to think critically about medication selection, dosage and route of administration for those medications used throughout pregnancy, labor and immediately postpartum.

Course Outcomes:

- Demonstrate an understanding of standards of drug therapy in midwifery
- Calculate drug dosages appropriately
- Select the appropriate route for administration
- For commonly used drugs, state the appropriate indication, dose, route, side effects and contraindications
- Recall the "rights" of drug administration
- Value accountability in drug administration
- Apply legal standards of drug administration to midwifery practice
- Demonstrate an understanding of medication use during pregnancy and lactation including altered pharmacodynamics, pharmacokinetics and teratogenicity

- Apply strategies to reduce the risk of drug resistance
- Select appropriate medications for use during labor (including active management of the third stage of labor, postpartum hemorrhage and selected obstetric complications)
- Demonstrate understanding of the appropriate use of vitamins and nutritional supplements during pregnancy and lactation
- Demonstrate an understanding of the effects of inappropriate use of recreational drugs

Competencies:

Knowledge	Attitude/Value	Skill
Demonstrate an understanding of standards of drug therapy in midwifery	Respect the importance of following the standards of care to protect patients from harm	Calculate dosages and administer drugs appropriately
State the appropriate indication, dose, route, side effects and contraindications of commonly used medications	Recognize the importance of accuracy in prescribing and administering medications.	
Recall the “rights” of drug administration	Value accountability in drug administration	Demonstrate these steps in the skills lab during simulations and OSCEs
Demonstrate an understanding of medication use during pregnancy and lactation including altered pharmacodynamics, pharmacokinetics and teratogenicity	Recognize the importance of these critical concepts in the care of women during pregnancy and lactation	
Define drug resistance	Recognize the importance of this concept as it pertains to medication use in a population over time	Apply strategies to reduce the risk of drug resistance
Select appropriate medications for use during labor (including active management of the third stage of labor, postpartum hemorrhage and selected obstetric complications)	Support interventions that are shown to reduce the risk of maternal and neonatal morbidity and mortality	
Demonstrate an understanding of the appropriate use of	Educate women on the importance of nutritional	Utilize subjective and objective data appropriately when

vitamins and nutritional supplements during pregnancy and lactation	supplements indicated for common conditions that occur during pregnancy	considering nutritional support for women during pregnancy
Demonstrate an understanding of the effects of inappropriate use of recreational drugs	Support women suffering from addiction to pharmaceutical and/or recreational drugs	

Course Content:

Unit I │ Introduction to Pharmacology (A review)

A. Pharmacotherapeutics
    1. Pharmacodynamics
    2. Pharmacokinetics:
        a) Absorption
        b) Distribution
        c) Metabolism
        d) Excretion
    3. Pharmacogenetics/Pharmacogenomics
B. Drug Calculations
C. Administration of Medications
    1. Oral
    2. Buccal/Sublingual
    3. Rectal
    4. Vaginal
    5. Injections:
        a) Intramuscular
        b) Subcutaneous
        c) Intravascular
        d) Epidural/intrathecal
D. Legal/Ethical Aspects of Care
    1. Accountability
    2. Regulation
    3. Administration of Prescription Medications Only
    4. Professional Requirements
    5. Civil Liabilities

Unit II │ Drugs in Pregnancy

A. Nutritional Supplements In Pregnancy
   1. Overview of Nutrition Requirements in Pregnancy:
      a) Prenatal vitamins
      b) Iron
      c) Folic acid
B. Use of Herbs in Pregnancy
C. Common Discomforts in Pregnancy
   1. Heartburn:
      a) Antacids
         (1) Milk of magnesia
         (2) Aluminum hydroxide
      b) H2 antagonist
         (1) Cimetidine
         (2) Ranitidine
      c) Proton pump inhibitors
         (1) Omeprazole
   2. Constipation:
      a) Stool softeners
      b) Laxatives:
         (1) Bulk forming vs stimulants
         (2) Castor Oil
         (3) Bisacodyl
      c) Glycerin suppositories
   3. Hemorrhoids:
      a) Hydrocortisone
   4. Nausea and Vomiting/Hyperemesis:
      a) Vitamin B6
      b) Antihistamines:
         (1) Diphenhydramine
         (2) Promethazine
      c) Dopamine antagonists:
         (1) Metoclopramide (These were from the current version)
         (2) Prochloperazine
      d) Serotonin antagonists:
         (1) Ondansetron
      e) Vitamin and fluid replacement

5. Leg Cramps:
    a) Mineral supplementation:
        (1) Magnesium
        (2) Calcium
        (3) Potassium
6. Backache:
    a) Analgesics:
        (1) Paracetamol

D. Antimicrobial Agents Used in Pregnancy

1. The Human Microbiome
2. Antibacterial:
    a) Classes:
        (1) Penicillins
        (2) Macrolides:
            i. Erythromycin
        (3) Lincosamide:
            i. Clindamycin
    b) Dosing
    c) Drug resistance
3. Antifungal:
    a) Nystatin
    b) Clotrimazole
    c) Flucanazole
    d) Whitfield's Ointment
4. Antiviral:
    a) HIV:
        (1) Antiretroviral (ARV) drugs:
            i. Lamivudine (3TC)
            ii. Abacavir (ABC)
            iii. Atazanavir (ATV)
            iv. Zidovudine (AZT)
            v. Stavudine (d4T)
            vi. Efavirenz (EFV)
            vii. Emtricitabine (FTC)
            viii. Fosamprenavir (FPV)
            ix. Indinavir (IDV)
            x. Lopinavir/Ritonavir (LPV/r)
            xi. Nevirapine (NVP)
            xii. Saquinavir (SQV)

xiii. Tenofovir alafenamide fumarate (TAF)

(2) Prevention of Mother to Child Transmission (PMTCT):

i. PrEP:

- Tenofovir disoproxil fumarate (TDF)
- TDF/Emtricitabine (TDF/FTC)

ii. Post-exposure Prophylaxis:

- TDF + 3TC (or FTC) + LPV or TVA
- RAL, DRV and EFV are viable alternatives
- 28-day course

(3) Treatment in pregnancy:

i. First line treatment in adults:

- Two nucleoside reverse-transcriptase inhibitors (NRTIs) plus a non-nucleoside reverse-transcriptase inhibitor (NNRTI) or an integrase inhibitor (INSTI)

(4) Treatment in labor

(5) Treatment of newborns:

i. AZT
ii. NVP

(6) Monitoring of drug therapy:

i. Active toxicity surveillance of PrEP during pregnancy and breastfeeding
ii. Viral load:

- Timing of testing

5. Antiprotozoal
    a) Quinine
    b) Metronidazole
    c) Artesunate
    d) Clindamycin
6. Insecticides
    a) Mosquito sprays
        (1) DEET
    b) Mosquito nets

E. Immunotherapy

1. Hypersensitivities/Allergic Reactions
2. Rhesus Incompatibility:
    a) Rhogam
3. The immune system in Pregnancy

Unit III │ Pre-Existing Diseases in Pregnancy

A. Asthma
    1. Short Acting Beta Agonists:
        a) Albuterol:
            (1) Nebulizers
    2. Long acting Beta Agonists:
        a) Xanthines:
            (1) Theophylline/Aminophylline
    3. Corticosteroids:
        a) Prednisone
        b) Betamethasone
        c) Dexamethasone
B. Diabetes
    1. Oral Medications:
        a) Glyburide
        b) Metformin
    2. Insulin:
        a) Humulin
        b) NPH
        c) Lente
C. Thyroid Disorders
    1. Review of Hormones and Laboratory Tests
    2. Hypothyroidism:
        a) Levothyroxine
    3. Hyperthyroidism:
        a) Propylthiouracil (PTU)
        b) Methimazole
    4. Epilepsy:
        a) Effects of pregnancy on epilepsy
        b) Effects of epilepsy on pregnancy:
            (1) Teratogenic effects of medications
        c) Classes of medication:
            (1) Barbiturates:
                i. Phenobarbital
            (2) Anticonvulsant:
                i. Carbamazepine
                ii. Phenytoin
                iii. Valproate

(3) Sedatives:
i. Clonazepam
d) Folic acid supplementation

D. Mental Health
1. Selective Serotonin Reuptake Inhibitors (SSRI's):
a) Citalopram
b) Fluoxetine
2. Tricyclic Antidepressants (TCAs):
a) Amitriptyline
3. Antipsychotics:
a) Chlorpromazine
b) Haloperidol
4. Anxiolytics
5. Lithium

E. Recreational Drugs
1. Alcohol
2. Caffeine
3. Nicotine
4. Cannabis
5. Opioids
6. Stimulants

Unit IV │ Drugs Used During Labor and Post-Operatives/Postpartum

A. Pain Relief
1. Inhalation Analgesia
2. Opioids
3. Local Anesthetics
4. NSAIDS:
a) Ibuprofen
b) Diclofenac
5. Analgesics:
a) Paracetamol

B. Cervical Ripening
1. Prostaglandins

C. Uterotonics
1. Oxytocin
2. Ergometrine
3. Misoprostol

4. Tranexamic Acid

D. Tocolytics
   1. Nifedipine
   2. Atosiban
   3. Beta Adrenergic Receptor Agonists:
      a) Risks/Contraindications

E. Corticosteroids
   1. Side Effects

Unit V │ Hypertension and Coagulation Disorders

A. Hypertensive Disorders
   1. Chronic Hypertension
   2. Gestational Hypertension:
      a) Beta Blocker:
         (1) Labetalol
         (2) Atenolol
      b) Calcium Channel Blocker:
         (1) Nifedipine
         (2) Amlodipine
      c) Alpha 2 agonist:
         (1) Methyldopa
   3. Preeclampsia
   4. Preeclampsia Superimposed on Chronic Hypertension:
      a) Magnesium Sulfate
      b) Hydralazine
      c) Administration
   5. HELLP Syndrome

B. Coagulation Disorders
   1. Hemolytic Disease of the Newborn:
      a) Vitamin K
   2. Hypercoagulation:
      a) Anticoagulants:
         (1) Heparin
         (2) Warfarin

Teaching/Learning Strategies:

- Lecture
- Discussion
- Simulation
- OSCEs
- Written assignments

Assessment Criteria – Standard Grading System:

- Attendance 5%
- Quizzes 25%
- Midterm Exam 30%
- Final Exam 40%

References:

King, T., Brucker, M., Jevitt, C. & Osborne, K. (2019). *Varney's Midwifery, 6th ed.* Burlington, MA: Jones and Bartlett.

Brucker, C. & King, T. (2017) *Pharmacology for Women's Health, 2nd ed.* Burlington, MA: Jones and Bartlett.

World Health Organization. (2017). Technical Brief: Preventing HIV during pregnancy and breastfeeding in the context of PrEP. Retrieved from: http://apps.who.int/iris/bitstream/handle/10665/255866/WHO-HIV-2017.09-eng.pdf;jsessionid=0302F2A00FFA417DFE04572C51BF972B?sequence=1

World Health Organization. (2016). *Consolidated Guidelines on the use of antiretroviral drugs for the treating and preventing HIV infection: Recommendations for a public health approach.* Retrieved from: https://apps.who.int/iris/bitstream/handle/10665/208825/9789241549684_eng.pdf?sequence=1

Drug Chart

For each drug, or class of drugs, listed on the course syllabus, complete the following chart:

Name of drug/class: _____

Indications	Dose/Route	Side effects	Contraindications	Nonpharmacological/comfort measures, additional notes

Research Methods

Credits: 3

Placement within the Curriculum:

Year 2, Semester 1

Duration:

16 weeks (14 instructional sessions, 1 exam session and 1 presentation session)
42 instructional hours (meets weekly in the computer lab for one 3-hour session each week)

Prerequisites:

Sophomore English, Statistics, Teaching Methodology, and Advanced Pharmacology

Course Description:

This course builds on the student's current knowledge of the research process and aims to empower students to challenge themselves to think critically about areas for which they have a strong interest or a self-identified knowledge gap. By the end of this course, students will feel confident in their ability to evaluate the literature, implement evidenced based care strategies and document their findings in a culminating research paper and presentation.

Course Outcomes:

- Access databases available on the internet
- Develop an effective literature search strategy by identifying appropriate key terms and using advanced search options
- Identify the characteristics of scholarly resources
- Evaluate the hypothesis, study methods and results of a research study
- Identify gaps in the research
- Identify any weaknesses or limitations of the study
- Utilize the American Psychological Association (APA) manual to improve writing skills, in text citations and reference lists

- Consider the generalizability of the findings
- Define plagiarism
- Appropriately cite references in your own work

Competencies:

Knowledge	Attitudes/Values	Skills
Develop an effective search strategy	Appreciate the importance of an effective literature search	Identifying appropriate key terms
Identify the characteristics of scholarly resources	Justify the importance of high-quality research	Distinguish between primary and secondary references
Evaluate the following when reading a scholarly article: • Hypothesis • Study methods • results	Value the importance of reading the hypothesis, study methods and results in a scholarly article	Practice critically reading primary sources
Identify gaps in the literature	Recognize the value of identifying under researched areas and proposing new ideas	State why a given research question is or is not valuable
Identify any weaknesses or limitations of the study	Recognize the value of identifying weaknesses/limitations when considering the quality of evidence	State any identified biases or inadequacies regarding testing methods, issues with sample sizes, etc.
Consider the generalizability of the findings	Recognize the value of this concept and how this applies to midwifery in Liberia	State your findings clearly when writing a research paper
Describe the possible uses of the APA manual	Appreciate the value of using the APA manual	Utilize the APA manual to improve writing skills, in text citations and reference lists
Define plagiarism	Respect the importance of giving credit to authors for their work	Learn how to quote, paraphrase and summarize appropriately
Appropriately cite references in your own work	Value the importance of citing references in your own work	Cite references in appropriate format

Course Content:

Unit I │ Week 1-4 (Sessions 1-8)

A. How to Critically Read and Analyze a Research Study
    1. How to Read and Understand a Scientific Article by Dr. Jennifer Raff
    2. Sample Articles
    3. Free and Open Access Databases:
        a) "Free Full Text Articles": Where to Search for Them?
        b) 101 Free Online Journal and Research Databases for Academics

B. 2. Sections of a Research Study
    1. Abstract
    2. Introduction
    3. Methods:
        a) Setting
        b) Design
        c) Sample size
        d) Sampling procedures
        e) Data collection instruments/procedures
        f) Variables
        g) Ethical considerations
    4. Data Analysis and Results:
    5. Discussion/Summary/Conclusion/Recommendations:
        a) Assessment of study methods
        b) Weaknesses/Limitations
        c) Generalizability
    6. Conflicts of Interest
    7. References

Assignment: Carefully read the 11 steps in the article by Dr. Raff. Select a research study of interest to you, preferably in a clinical area that you feel you need to learn more about and answer the questions within each of the 11 steps in a Word document. Email this document to your professor when you are finished. You have four weeks to complete this assignment twice.

Unit II │ Weeks 5-7 (Sessions 9-14)

A. Select one of the two above articles that were used in the assignments completed in weeks 1-4. Complete a literature search with the goal of identifying the following:

1. Gaps in the literature: State the idea you have for further exploration as well as what this would contribute to the scientific understanding of the topic.
2. Weaknesses/Limitations (Biases, inaccuracies regarding testing methods, issues with sample sizes, etc.): How are the findings less valid given these weaknesses?
3. Generalizability: Can the evidence presented in the study be applied to midwifery in Liberia? Explain why or why not.

Week 8 Midterm Exam

Unit III │Weeks 9-15 (Sessions 15-28)

In the second half of this course, students are given ample class time to develop a brief term paper (3 pages-not to exceed 4 pages)

A. Week 9: select a topic (to maximize your learning/exposure to new information, students should choose a unique topic)
B. Week 10: Literature search
C. Week 11: Create outline (to be approved by instructor before beginning to write)
D. Weeks 12-13: Write paper
E. Weeks 14-15: Create PowerPoint Presentation
F. Week 16: Presentations to classmates and instructors

Teaching/Learning Strategies:

- Lecture/Discussion
- Computer lab practice
- Reading assignments/articles (homework)

Course Expectations:

- Regular attendance
- Come to class prepared
- Participate actively in sessions
- Complete all assignments by the assigned due dates

Required Resources:

- Computers/Internet access

Clinical Evaluations/Assessment Criteria:

1.	Attendance	5%
2.	Midterm	20%
3.	Assignments for Weeks 1-7 (three total assignments)	30%
4.	Term Paper	30%
5.	Presentation	15%

References:

American Psychological Association. (2010). *Publication Manual of The American Psychological Association, 6th ed.* Washington, D.C: American Psychological Association.

Raff, J. (2013) How to read and understand a scientific article. https://violentmetaphors.com/2013/08/25/how-to-read-and-understand-a-scientific-paper-2/

Scribendi (2019). 101 Free on-line journals and research databases for academics. https://www.scribendi.com/advice/free_online_journal_and_research_databases.en.html

Singh, A., Singh, M., Singh, A. K., Singh, D., Singh, P., & Sharma, A. (2011). "Free full text articles": where to search for them? *International journal of trichology*, *3*(2), 75-9.

How to Read and Understand a Scientific Article

Dr. Jennifer Raff

To form a truly educated opinion on a scientific subject, you need to become familiar with current research in that field. And to be able to distinguish between good and bad interpretations of research, you have to be willing and able to read the primary research literature for yourself. Reading and understanding research papers is a skill that every single doctor and scientist has had to learn during graduate school. You can learn it too, but like any skill it takes patience and practice.

Reading a scientific paper is a completely different process from reading an article about science in a blog or newspaper. Not only do you read the sections in a different order than they're presented, but you also have to take notes, read it multiple times, and probably go look up other papers in order to understand some of the details. Reading a single paper may take you a very long time at first, but be patient with yourself. The process will go much faster as you gain experience.

The type of scientific paper I'm discussing here is referred to as a primary research article. It's a peer-reviewed report of new research on a specific question (or questions). Most articles will be divided into the following sections: abstract, introduction, methods, results, and conclusions/interpretations/discussion.

Before you begin reading, take note of the authors and their institutional affiliations. Some institutions (e.g. University of Texas) are well-respected; others (e.g. the Discovery Institute) may appear to be legitimate research institutions but are actually agenda-driven. *Tip: google "Discovery Institute" to see why you don't want to use it as a scientific authority on evolutionary theory.*

Also take note of the journal in which it's published. Be cautious of articles from questionable journals, or sites that might resemble peer-reviewed scientific journals but aren't (e.g. Natural News).

Step-by-Step Instructions for Reading a Primary Research Article

1. Begin by reading the introduction, not the abstract.
The abstract is that dense first paragraph at the very beginning of a paper. In fact, that's often the *only* part of a paper that many non-scientists read when they're trying to build a scientific argument. (This is a terrible practice. Don't do it.) I always read the abstract last,

because it contains a succinct summary of the entire paper, and I'm concerned about inadvertently becoming biased by the authors' interpretation of the results.

2. Identify the *big* question.
Not "What is this paper about?" but "What problem is this entire field trying to solve?" This helps you focus on why this research is being done. Look closely for evidence of agenda-motivated research.

3. Summarize the background in five sentences or less.
What work has been done before in this field to answer the big question? What are the limitations of that work? What, according to the authors, needs to be done next? You need to be able to succinctly explain why this research has been done in order to understand it.

4. Identify the *specific* question(s).
What exactly are the authors trying to answer with their research? There may be multiple questions, or just one. Write them down. If it's the kind of research that tests one or more null hypotheses, identify it/them.

5. Identify the approach.
What are the authors going to do to answer the specific question(s)?

6. Read the methods section.
Draw a diagram for each experiment, showing exactly what the authors did. Include as much detail as you need to fully understand the work.

7. Read the results section.
Write one or more paragraphs to summarize the results for each experiment, each figure, and each table. Don't yet try to decide what the results *mean*; just write down what they *are*. You'll often find that results are summarized in the figures and tables. Pay careful attention to them! You may also need to go to supplementary online information files to find some of the results. Also pay attention to:

- The words "significant" and "non-significant." These have precise statistical meanings.
- Graphs. Do they have error bars on them? For certain types of studies, a lack of confidence intervals is a major red flag.
- The sample size. Has the study been conducted on 10 people, or 10,000 people? For some research purposes a sample size of 10 is sufficient, but for most studies larger is better.

8. Determine whether the results answer the specific question(s).
What do you think they mean? Don't move on until you have thought about this. It's OK to change your mind in light of the authors' interpretation -- in fact, you probably will if you're still a beginner at this kind of analysis -- but it's a really good habit to start forming your own interpretations before you read those of others.

9. Read the conclusion/discussion/interpretation section.
What do the authors think the results mean? Do you agree with them? Can you come up with any alternative way of interpreting them? Do the authors identify any weaknesses in their own study? Do you see any that the authors missed? (Don't assume they're infallible!) What do they propose to do as a next step? Do you agree with that?

10. Go back to the beginning and read the abstract.
Does it match what the authors said in the paper? Does it fit with your interpretation of the paper?

11. Find out what other researchers say about the paper.
Who are the (acknowledged or self-proclaimed) experts in this particular field? Do they have criticisms of the study that you haven't thought of, or do they generally support it? Don't neglect to do this! Here's a place where I do recommend you use Google! But do it last, so you are better prepared to think critically about what other people say.
A full-length version of this article originally appeared on the author's personal blog (www.violentmetaphors.com). She gratefully acknowledges Professors José Bonner (Indiana University) and Bill Saxton (UC Santa Cruz) for teaching her how to read scientific papers using this method.

Embryology and Genetics

Credits: 3

Placement within the Curriculum:

Year II, Semester I

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours - class meets weekly for one 3-hour session

Prerequisites:

Sophomore English, Statistics, Teaching Methodology, and Advanced Pharmacology

Course Description:

This course will focus on human development from fertilization to the 8th week of pregnancy. After mastering normal development including implantation, gastrulation and organogenesis the focus will shift to abnormal development, i.e. congenital anomalies. The final unit will focus on genetic disorders that may affect the care and management provided by the midwife during pregnancy and throughout the lifespan. Use of the three-generation pedigree will be examined. Students will learn effective genetic and preconception counseling strategies that can be utilized by the midwife.

Course Outcomes:

- State the purpose of studying embryology and genetics
- Discuss the embryonic disc and the three germ layers
- Describe zygote formation, embryonic and fetal development by each week of gestation
- Discuss placental development including the structure, function and its role in the development of preeclampsia
- Identify the inheritance patterns of selected chromosomal disorders
- State the causes of structural birth defects
- Create a three-generation pedigree

- Define primary, secondary and tertiary prevention as it pertains to genetic
- Describe the role of the midwife in preconception counseling
- Develop a plan of care of women diagnosed with selected genetic disorders

Competencies:

Knowledge	Attitude/Value	Skill
State the purpose of studying embryology and genetics	Recognize the value in understanding the relationship between health outcomes human development	Explains to the woman and family, the critical periods of development and steps that can help to prevent injury or abnormalities to the unborn child
Describe zygote formation, embryonic and fetal development by each week of gestation	Identify lifestyle changes that can contribute to improved outcomes when women are counseled before conception occurs	Develop materials that will aid in teaching clients
Discuss placental development including the structure, function and its role in the development of preeclampsia	Value the importance of understanding the origin of disease processes	Apply these concepts to the care you provide in the clinical setting
Identify the inheritance patterns of selected chromosomal disorders	Utilize the referral system to consult, collaborate and refer at risk clients	Create a three-generation pedigree
State the causes of structural birth defects	Identify the range of contributing causes	Counsel women on their modifiable risk factors
Discuss the role of the midwife in preconception counseling	Utilize the midwifery management process in genetic and preconception counseling	Develop a plan of care for women diagnosed with selected genetic disorders that can impact pregnancy outcomes

Course Content:

Unit I │ Introduction to Embryology

A. Purpose of the Study of Embryology for Midwives
B. Biology Review
    1. Chromosomes/Genes:
        a) Deoxyribonucleic Acid (DNA)
        b) Ribonucleic Acid (RNA)
    2. Cell Division:
        a) Miosis
        b) Mitosis
C. Gametogenesis
    1. Oogenesis
    2. Spermatogenesis
D. Conception
    1. Ovulation:
        a) Corpus luteum
    2. Fertilization:
        a) Sperm transport
        b) Capacitation
        c) Acrosomal reaction

Unit II │ Embryonic and Fetal Development

A. Blastocyst Formation
    1. Zona Pellucida
    2. Trophoblast
    3. Embryoblast
    4. Fluid-Filled Blastocyst Cavity
B. Periods of Embryonic Development
    1. Preembryonic (0-2 weeks):
        a) Twin Gestation
            (1) Monozygotic
            (2) Dizygotic
    2. Embryonic (2-8 weeks):
        a) Organogenesis by Week of Gestation:
            (1) Germ layers:
                i. Endoderm

ii. Mesoderm
iii. Ectoderm

C. Fetal Development (9 weeks until delivery)
    1. Early Fetal Period (9-20 weeks):
        a) Differentiation of body structures
    2. Late Fetal Period (20 weeks until birth):
        a) Increase in Function

D. Placental Development
    1. Structure/Function:
        a) Maternal/fetal circulation:
            (1) Transport of nutrients:
                i. Simple diffusion
                ii. Facilitated diffusion
                iii. Active transport
            (2) Villi/intervillous spaces
            (3) Spiral arteries:
                i. Abnormal placentation
                - Preeclampsia
    2. Amnion/Chorion
    3. Umbilical Cord
    4. Amniotic Fluid:
        a) Production:
            (1) Polyhydramnios
            (2) Oligohydramnios
        b) Composition

Unit III │ Genetic/Chromosomal Disorders

A. Inheritance Patterns
    1. Autosomal:
        a) Dominant
        b) Recessive
        c) Sex-linked

B. Abnormal Structure of Chromosomes
    1. Deletions (examples):
        a) Retinoblastoma
        b) Prader-Willi syndrome
        c) Duchhenne Muscular Dystrophy
        d) DiGeorge syndrome

2. Duplications
3. Translocations

C. Abnormal Number of Chromosomes
    1. Triploidy
    2. Aneuploidy (Types/examples):
        a) Monosomy:
            (1) Turner Syndrome
        b) Trisomy:
            (1) Down's Syndrome (21)
            (2) Patau (13)
            (3) Edward's (18)

D. Structural/Functional Birth Defects
    1. Causes:
        a) Genetic abnormalities
        b) Exposure to environmental toxins
        c) Maternal infections
        d) Alcohol
        e) Drug exposure (prescription and illegal)
        f) Nutritional deficiencies
        g) ABO/Rh incompatibilities

E. High Risk Populations
    1. Consanguinity
    2. Older Age (maternal and paternal):

F. Selected Conditions Common in Liberia
    1. Hemoglobinopathies:
        a) Sickle Cell Anemia
        b) Beta Thalassemia
        c) Alpha Thalassemia
    2. Glucose-6-Phosphate Dehydrogenase (G6PD):

G. Selected Genetic Conditions Affecting the Newborn
    1. Phenylketonuria
    2. Congenital Hypothyroidism
    3. Congenital Adrenal Hyperplasia
    4. Cystic Fibrosis

H. Providing Effective Care in Pregnancy
    1. Consultation, Collaboration and Referral
    2. Primary Prevention:
        a) Family history:
            (1) Pedigree

b) Preconception care:
(1) Folic acid supplementation
(2) Avoidance of teratogens
c) Carrier screening
d) Prenatal screening
e) Genetic counseling

3. Secondary Prevention:
    a) Newborn screening
4. Tertiary Prevention:
    a) Surgical repair
    b) Rehabilitation

I. Social, Cultural, Economic, Psychosocial and Policy Issues
1. Burden of Disease
2. Confidentiality

Teaching/Learning Strategies:

- Lecture
- Interactive discussion
- Simulation
- OSCEs
- Written assignments
- Group work/presentations

Assessment Criteria – Standard Grading System:

- Attendance 5%
- Pedigree 10% (see sample pedigree and article by Wattendorf)
- Assignments 10% *Reflections on articles by Cassell, et. al. & Mendes, et. al. (5% each)*
- Quizzes 20%
- Midterm 25%
- Final 30%

References:

Cassell, A., Geu, A., Okao, P., Coleman, P. & Freeman, S. (2017). A retrospective study of the epidemiology of congenital anomalies at the John F. Kennedy Medical Center.

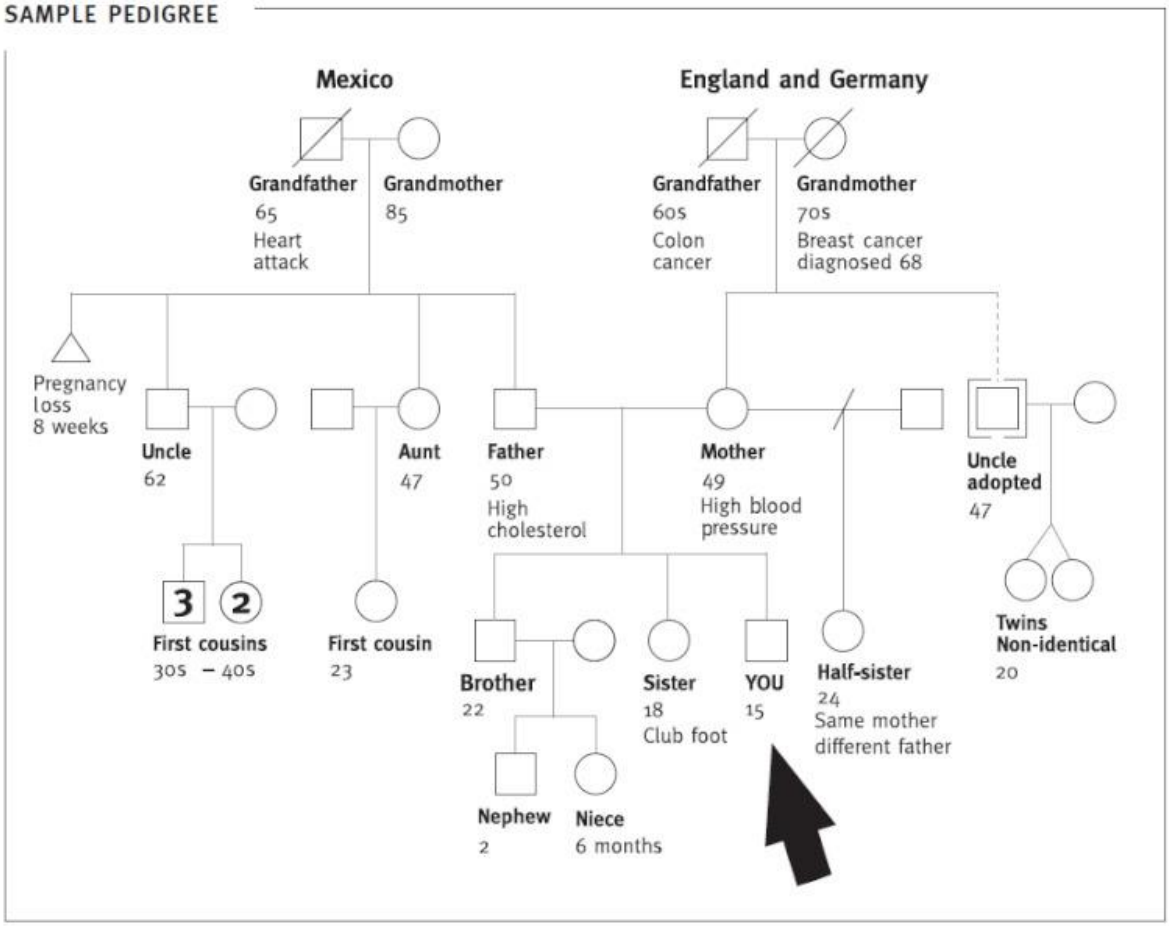
International Journal of Scientific & Engineering Research, 8(6), 1383-1386. Retrieved from: https://www.ijser.org/researchpaper/A-Retrospective-Study-of-the-Epidemiology-of-Congenital-Anomalies-at-The-John-F-Kennedy-Medical-Center.pdf

King, T., Brucker, M., Jevitt, C. & Osborne, K. (2019). *Varney's Midwifery, 6th ed.* Burlington, MA: Jones and Bartlett.

Mendes, A., Metcalfe, A., Paneque, M., Sousa, L., Clarke, A. & Sequeiros, J. (2018). Communication of information about genetic risks: Putting families at the center. *Family Process, 57*, 836-846. doi: 10.1111/famp.12306

Wattendorf, D. & Hadley, D. (2005). Family history: The three-generation pedigree. *American Family Physician, 72*(3), 441-448. Retrieved from: https://www.aafp.org/afp/2005/0801/p441.html

World Health Organization. (2010). *Community Genetic Services: Report of a WHO consultation on community genetics in low- and middle- income countries.* Retrieved from: http://apps.who.int/iris/handle/10665/44532



Genetic Alliance; The New York-Mid-Atlantic Consortium for Genetic and Newborn Screening Services. Understanding Genetics: A New York, Mid-Atlantic Guide for Patients and Health Professionals. Washington (DC): Genetic Alliance; 2009 Jul 8. CHAPTER 3, PEDIGREE AND FAMILY HISTORY-TAKING. Available from: https://www.ncbi.nlm.nih.gov/books/NBK115557/

Developmental Psychology

Credits: 3

Placement within the Curriculum:

Year 2, Semester 1

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours

Prerequisites:

Sophomore English, Statistics, Teaching Methodology, and Advanced Pharmacology

Course Description:

Psychology 202 is a follow-up course to Psychology 201 and emphasizes human development beginning from the prenatal stage to the stages of aging and death. Major themes throughout this course include the biological, cognitive, and socio-emotional processes that characterize the various stages of human development. Theoretical and practical methods of instruction will be used to relate nursing/midwifery care to each developmental stage.

Course Objectives:

- Describe the concept of development in the human context
- Describe milestones of each developmental stage of humans
- Apply knowledge of human development to nursing/midwifery care setting
- Demonstrate the role of the nurse/midwife in meeting the needs of clients through the lifespan

Course Content:

Unit I │ Concepts of Human Development

A. Introduction
    1. Definition of Development
B. Theories of Human Development
C. Processes of Human Development
    1. Biological
    2. Cognitive
    3. Socio-Emotional
D. Maturation & Experience (Nature vs. Nurture)
E. Continuity & Discontinuity

Unit II │ Child Development

A. Theories of Child Development
B. Prenatal Development
C. Cognitive Development
D. Physical Development
E. Socio-Emotional Development

Unit III │ Development in Adolescents

A. Historical Beginnings and the Nature of Adolescence
B. Cognitive Development
C. Socio-Emotional Development
D. The Challenges of Adolescence

Unit IV: Adult Development and Aging

A. Periods of Adult Development
B. Physical Development
C. Cognitive Development
D. Socio-emotional Development
E. Death and Dying

Competencies:

Knowledge	Attitudes/Behavior	Skills
Explains the relevance of developmental psychology to health practice	Demonstrates belief in the relevance of developmental psychology to health practice	State your belief in the importance of developmental psychology to health practice
Analyzes critical factors of growth and development regarding provision of health care services across the life span	Integrates principles regarding critical factors of growth and development into plan of care for patients across the life span	Initiates plan of care for patients considering critical factors of growth and development across the life span
Applies psychological concepts in the counseling of clients	Complies with concepts of development while counseling patients	Follows psychological and social concepts during patient counseling
Prepares collaborative plans with individuals, families and communities to influence positive growth and development health behavior	Assists individuals, families and communities to develop plans that support achievement of growth and developmental milestones	Begin simple mention of plans in collaboration with individuals, families and communities in support of growth and developmental

Teaching/Learning Strategies:

- Lectures/discussions
- Group work
- Self-directed learning
- Field Trips

Assessment Criteria – Standard Grading System:

- Attendance 5%
- Written Examinations 50%
- Quizzes 25%
- Group Project 20%

Required Texts:

Lally, M. & Valentine-French, S. (2019). Lifespan Development: A Psychological Perspective, 2nd ed. Available for free download at: http://dept.clcillinois.edu/psy/LifespanDevelopment.pdf

Professional Issues in Midwifery

Credits: 3

Placement within the Curriculum:

Year 2, Semester 1

Duration:

16 weeks (14 instructional and 2 exam sessions)
42 instructional hours - class meets weekly for one 3-hour session

Prerequisites:

Sophomore English, Statistics, Teaching Methodology, and Advanced Pharmacology

Course Description:

This course is designed to examine current issues in midwifery practice and the influence of societal/environmental trends on the practice of the profession. Emphasis will be placed on the historical, philosophical, ethical and political aspects of the midwifery profession. These major areas are considered within the context of the global community and macro and micro society with special emphasis on midwifery issues in Liberia.

Course Outcomes:

By the end of the course, students will be able to:

- Discuss the historical perspectives of midwifery issues and how they have created change in the profession
- Explain the educational and professional track of midwifery, especially in the context of Liberia
- Evaluate the role of professional organizations on the profession of midwifery
- Describe the influence of government on the profession and the role of midwives in the workplace
- Critique the role of international organizations in supporting the midwifery profession
- Discuss various issues in midwifery that affect clinical practice

- Explain the influence of informatics on the midwifery profession
- Describe tele-medicine/tele-health and the role midwives can play in this technological advancement

Competencies:

Knowledge	Attitude/Value	Skill
Discuss historical trends in the midwifery profession	Demonstrate appreciation for the rich history that has shaped the profession	
Summarizes the educational and professional track of midwifery in Liberia	Displays commitment to the profession by supporting professional organizations	Volunteers time and resources to endure that midwifery education and practice meet international standards
Evaluates the role of professional organizations on the profession	Demonstrates an understanding of how professional organizations support the profession	Displays a commitment to the profession through support of professional organizations
Analyses the impact of politics on the profession	Appreciates the role that politics play in the midwifery profession	Engages in advocacy/lobbying for increased government support
Critiques the role of international organizations in supporting the midwifery profession	Advocates for increased international recognition	Engages in advocacy/lobbying for increased international support
Explains the influence of informatics on the profession	Supports introduction of informatics into midwifery education	Supports introduction of informatics into the profession and practice
Analyses methods of patient empowerment	Values the individuality and human rights of the patient	Supports client's choices through shared decision making

Course Content:

Unit I │ Historical Perspectives

A. Trends within the midwifery profession

Unit II │ Professional Development

A. Educating Midwives
    1. Educational Pathways:
        a) CM
        b) RM
        c) BS
        d) MS
        e) Doctoral/PhD
    2. Competencies:
        a) Continuing Professional Development (CPDs)
        b) In-service trainings
        c) Workshops/Seminars
B. Licensure and Employment/Career Pathways
    1. Midwifery Code of Ethics
    2. Career Tracks:
        a) Hospitals
        b) Outpatient clinics
        c) Specialized practice
            (1) Nurse-Midwifery
            (2) Ward Staff
            (3) Clinical specialists
            (4) Administrators
            (5) Educators
            (6) Researchers
    3. Professional relationship issues (ethics)
    4. Quality assurance and competency
C. The Role of Professional Organizations (structure/function)
    1. The Liberian Board for Nursing and Midwifery (LBNM)
    2. The Liberian Midwifery Association (LMA)
    3. The Liberian Nurses Association (LNA)
    4. The International Confederation of Midwives (ICM)
    5. The International Council of Nurses (ICN)

D. The role of Interprofessional Organizations
    1. Liberian Medical and Dental Council (LMDC)
    2. The West African Postgraduate Medical Colleges (WAPMC)
    3. West African College of Nursing (WACN)
    4. West African Health Organization (WAHO)
E. Regulation in Midwifery Practice
    1. Midwifery as a Global Entity
    2. ICM Agenda
    3. Practice Act
    4. LBNM Regulations

Unit III │ Healthcare Delivery System

A. Politics and Healthcare
    1. Influence of International Organizations:
        a) WHO
        b) United Nations Population Fund (UNFPA)
        c) United Nations International Children's Emergency Fund (UNICEF)
        d) United States Agency for International Development (USAID)
        e) Health Resources and Service Administration (HRSA)
        f) The United States President's Emergency Plan for AIDS Relief (PEPFAR)
        g) Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO)
    2. Reforms in Healthcare
B. Government Policies and Regulations
    1. Policy Development
    2. Case Example-Female Genital Mutilation:
        a) History/recent evolution
C. Comparative Systems
    1. Africa
    2. America
    3. Europe
    4. Asia
D. Care Settings
    1. Private vs Public
    2. Hospitals
    3. Health Centers
    4. Clinics

5. Community Outreach Teams

E. Traditional vs modern approaches
F. Economics and the healthcare delivery system:
    1. Financing

Unit IV │ Culture

A. Diversity
    1. Tribal
    2. Religious
    3. Racial
    4. Other Types of Diversity

Unit V │ The Workplace

A. Safety
B. Burnout
C. Image
D. Ageing Workforce

Unit VI │ Patient self-determination

A. Quality of Life
    1. Financial considerations
B. Informed Consent
C. Patient Empowerment
    1. Shared decision making
    2. Autonomy
D. Human Rights

Unit VII │ Emerging diseases

A. Current issues in Midwifery

Unit VII │ Informatics

B. Telemedicine

Teaching/Learning Strategies:

- Lecture
- Discussion
- Simulation
- OSCEs
- Written assignments

Assessment Criteria – Standard Grading System:

- Attendance 5%
- Quizzes 10%
- Written assignments (due before midterm and final, 4-5 pages using strategies learned in research methods) 30%
- Advocacy project (write a letter to a government official or an international agency of your choosing advocating for something that you feel would improve the profession of midwifery) 10%
- Midterm 20%
- Final 25%

References:

International Confederation of Midwives (no date). Comprehensive Midwifery Programme Guidance. Retrieved from: https://www.unfpa.org/sites/default/files/resource-pdf/Midwifery%20Programme%20Guidance.pdf

Liberian Board for Nursing and Midwifery. (2019). http://lbnm.gov.lr/

Practicum/BSc Senior Seminar

Credits: 6

Placement within the Curriculum:

Year 2, Semester 2

Duration:

16 weeks: Five 3-hour sessions with instructor (15 hours classroom) **PLUS** 3-6 hours of independent study per week. Students attend practicum two 8-hour days per week x14w (224 hours).

Prerequisites:

English II, Pathophysiology of the Reproductive System, The Principles of Management, Sophomore English, Statistics, Teaching methodology & Curriculum Development, Research Methods, Advanced Pharmacology, Embryology and Genetics, Developmental Psychology, Professional Development in Midwifery

Course Description:

In this final practicum of the BSc program, students will choose from one of the following areas of interest and work alongside a midwife (or other professional) in that setting. The areas are as follows:

- Teaching/Curriculum development: CMs, RMs, Teaching assistant in BSc program
- Administration: Ward, department or clinic manager
- Leadership: Internship with a governmental organization, nongovernmental organization, or international agency
- Entrepreneurship: Internship with a small business or corporation whose mission aligns with that of the profession of midwifery
- Research: Internship

In addition to the practicum, students will write a final paper that relates to their practicum. Students will meet with the course instructor independently or in small groups arranged by area of interest at regular intervals throughout the semester for guidance on

developing their thesis statement, writing an outline and the final paper. The course will culminate with presentations by the students.

Course Outcomes:

Review outcomes for the associated courses (Teaching Methodology and Curriculum Development, Research Methodology, The Principles of Management, Professional Issues in Midwifery)
In addition to the course specific outcomes, by the end of the course, students will be able to:

- Develop a thesis statement
- Create an outline that effectively guides the writing process
- Evaluate a topic/issue of importance to an area of interest/practicum
- Reflect on own experience to guide professional development

Competencies:

Review competencies for the associated courses (Teaching Methodology and Curriculum Development, Research Methodology, The Principles of Management, Professional Issues in Midwifery)

Course Content:

Below is a list of goals/assignments to be completed by each session (date to be determined by course instructor). The average student will spend 3-6 hours per week **INDEPENDENTLY** working on these assignments.

Session 1: Entire Class (Week 1)

Meet to discuss the following:

- Placements
- Individual practicum expectations
- Development of personal goals
- Best practices for writing the final paper

Session 2: Individual or Small Groups (should occur between weeks 3-5)

- Submit reflection #1 and personal goals
- Select three possible topics/issues that relate to area of interest/practicum

- Provide the following information on each topic/issue:
- Thesis statement (one sentence)
- Background information: Why is this topic/issue of importance? (can be bullet points)
- How does it relate to the profession of midwifery?
- How does this affect the population being discussed?
- What is your argument? What is the counter argument?

Session 3: Individual or Small Groups (should occur between weeks (7-9)

- Submit reflection #2
- Submit 1st draft of background section written in paragraph form
- Present your literature review
- Present an outline of the entire paper and any brainstorming materials that you have created

Session 4: Individual or Small Groups (should occur between weeks 11-13)

- Submit reflection #3
- Submit completed paper
    - Length: 5-7 pages double spaced
- Reference list

Session 5: Entire Class (Week 16)

- PowerPoint
    - Length/maximum number of slides: 15
    - Length/time: 15 minutes

Teaching/Learning Strategies:

- Group discussion
- Independent study
- Written assignments

Assessment Criteria – Standard Grading System:

- Attendance at required sessions 5%
- Reflections 30% (10% for each reflection)
- Final paper 45%
- Presentation 20%
- Midterm practicum evaluation (satisfactory/unsatisfactory)
- Final practicum evaluation (satisfactory/unsatisfactory)

Reflections:

Describe a personal experience or observation you have made while working in your practicum. This is a safe space for you to express yourself and your ideas and is a skill essential for your professional development.

- Examples include but are not limited to:
- (Teaching) A challenging student or a student for whom you helped overcome a challenge
- (Management/Administration) A systems issue recently identified
- (Leadership) Identification of effective or ineffective strategies used by leaders
- (Entrepreneurship) Financial challenges or implementation of a new strategy

Explain what you have learned from this experience and how you might adjust/adapt to achieve your goal.

References:

American Psychological Association. (2010). *Publication Manual of The American Psychological Association, 6th ed.* Washington, D.C: American Psychological Association.