COURSE OUTLINE

OMA	OMA*103		Ophthalmic Clinical Skills and Procedures		4
Dept. Abbr.	**Course No.**		**Course Title**		**Credits**
Prepared by	ODD	Rose Malczynski Dorothy Mikulski	Raymond Dennis	Dr. Lin Lin	Sept. 2015
	Department	**Faculty**	**Program Coordinator**	**Academic Division Director**	**Date**

OMA*103, Ophthalmic Clinical Skills and Procedures (4 credits)
This course emphasizes basic skills in patient care and examination techniques to include medical history taking and the assessment of the pupils. Additional clinical training will include tonometry, first aid treatment, retinoscopy, biomicroscopy, objective and subjective refractometry, measuring vital signs, clinical equipment maintenance and visual field analysis. Other topics include an overview of ophthalmic pharmacology, comparing drug delivery systems and administering and recording topical and oral medications at a physician's direction. A safety component of the course covers office and clinic safety, microbiology, disinfection/sterilization and control of infections and prevention of contamination in a medical facility, Prerequisite: Eligible for ENG*101 or ENG*101E

General Objectives of the Course

Upon completion of this course the learner will be able to:

1. Describe the advantages and disadvantages of various methods of drug delivery
2. Describe the components of a medical prescription
3. Describe and demonstrate the correct method of instilling drops and ointments
4. Test and record visual acuity
5. Test and record the visual field
6. Measure, compare, and evaluate pupil function
7. Perform automated and manual keratometry and record keratometry readings
8. Define and measure intraocular pressure
9. Measure intraocular pressure
10. Assess and record the results of supplemental eye tests
11. Perform the external examination with penlight and slit lamp
12. Measure and record axial length
13. Clean, sterilize, and prepare instruments for minor office surgical procedures
14. Assist the physician with office-based minor surgical procedures
15. Apply proper sterile technique procedures to ensure safety/security
16. Maintain surgical asepsis and universal precautions
17. Measure refractive error with an automated refractor
18. Perform and record retinoscopy
19. Refine refractive error (sphere and cylinder) using phoropter or trial lenses in +/- cylinder
20. Use refractometry techniques: fogging, duo chrome, binocular balance
21. Describe procedures for collecting, labeling, preserving, staining, and culturing of specimens from patients with ocular problems
22. Explain the principles of electrophysiological tests and prepare patient and equipment for tests
23. Perform ocular motility tests

Unit #	Instructional Unit	Specific Objectives of Unit Upon completion of this course the learner will be able to:
1.	Pharmacology	1. Describe the components of a medical prescription 2. Describe and demonstrate the correct method of instilling drops and ointments 3. Describe the indications, contraindications, and potential side effects of common ophthalmic medications
2.	Visual Assessment	1. Test and record visual acuity appropriately for patients with all levels of acuity (e.g., count fingers, hand motion, light perception, no light perception)

		2. Test and record visual acuity using the pinhole occluder 3. Test and record visual acuity using Allen figures or picture tests 4. Test and record near vision
3.	Visual Fields	1. Test and record using a Amsler Grid 2. Test and record and calibrate using the Goldmann perimeter 3. Determine proper correction for the visual field test 4.Test and record using the Automated perimeter and record Confrontation fields
4.	Pupillary Assessment	1. Measure, compare, and evaluate pupil function - Direct and consensual response 2. Identify relative afferent pupillary defect using the swinging-light test
5.	Keratometry	1. Perform automated and manual keratometry and record keratometry readings
6.	Tonometry	1. Define and measure intraocular pressure 2. Clean and disinfect tonometers
7.	Supplementary Tests	1. Assess and record anterior chamber depth (pen light) 2. Perform and record color vision 3. Perform and record pachymetry 4. Perform and record Schirmer tests 5. Perform and record Amsler Grid
8.	Examination of the Eye and Face	1. Perform the external examination - demonstrate use of the penlight and demonstrate use of slit lamp
9.	Biometry	1. Measure and record axial length of the eye
10.	Refractometry, Retinoscopy, and Refinement	1. Measure refractive error with an automated refractor 2. Perform and record retinoscopy 3. Refine refractive error (sphere and cylinder) using phoropter or trial lenses in +/- cylinder 4. Perform refractometry techniques: fogging, duo chrome, binocular balance
11.	Supplementary Tests – Advanced	1. Perform and record stereoacuity testing and glare testing 2. Perform and record automated perimetry 3. Perform and record manual perimetry 4. Identify the indications of use for the direct ophthalmoscopy, indirect ophthalmoscopy, and slit lamp lenses
12.	Ophthalmic Imaging	1. Label photos with patient identification 2. Perform external photography 3. Perform and record corneal topography 4. Perform and record fundus photography
13.	Special Diagnostic Testing	1. Describe procedures for collecting, labeling, preserving, staining, and culturing of specimens from patients with ocular problems
14.	Electrophysiology	1. Explain the principles of binocular vision and perform advanced color vision tests.
15.	Abnormalities of Binocular Vision	1. Identify indications for motility testing based on patient symptoms 2. Perform advanced ocular motility tests 3. Test for abnormal binocular vision

COURSE SYLLABUS

Textbooks and other required readings/computer software/materials/library reserve room: None

Office Location (building/room number): Chapman Hall / Room 625

Office-

Office Hours: By appointment

Email: Rose Malczynski –rose.malczynski@gmail.com
Dorothy Mikulski - dmikulski81@yahoo.com
Class Cancellation Policy:
Class Cancellation will be determined by the College administration, and will disseminated by a variety of media outlets including both television and radio. (See information below)

Evaluation (exams, projects, etc., and percentages towards final grades):
Grades will be based on performance on class exams, class assignments and assessments, the final exam, and class participation. Computation of the grades will be as follows:
TEST #1 - 25%
TEST #2 - 25%
Assessments and homework - 20%
FINAL Exam - 25%
Class Participation – 5%

Letter Grade Equivalents

(A) 100 95	(B) 86 84	(C) 76 74	(D) 66 64
(A) 94 90	(B) 83 80	(C) 73 70	(D) 63 60
(B+) 89 87	(C+) 79 77	(D+) 69 67	(F) 59 and under

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Primary Title IX Coordinator
Dr. Adrienne Maslin; Dean of Students/Title IX and Section 504/ADA Coordinator
amaslin@mxcc.edu; 860-343-5759; Founders Hall Room 123

Secondary Title IX Coordinator
Ms. Queen Fordham, Coordinator of the Meriden Center Welcome Desk
qfordham@mxcc.edu; 203-608-3011.