

## COURSE OUTLINE

OMA	OMA*102	Ocular Anatomy, Physiology and Pathology			3
<b>Dept. Abbr.</b>	<b>Course No.</b>	<b>Course Title</b>			<b>Credits</b>
Prepared by	ODD	Dr. Joseph Bacotti	Raymond Dennis	Dr. Lin Lin	Sept. 2015
	<b>Department</b>	<b>Faculty</b>	<b>Program Coordinator</b>	<b>Academic Division Director</b>	<b>Date</b>

OMA\*102, Ocular Anatomy, Physiology and Pathology (3 credits)

This course provides the learner with a detailed study of normal ocular anatomy, physiology and pathology. Topics to include; medical terminology and vocabulary commonly used in health care field, the origin of words with emphasis on suffixes, prefixes, roots, abbreviations and terminology pertinent to body systems. It includes the fundamentals of common external and internal diseases of eye and the orbital region, emphasizing the ocular effects of systemic diseases, identification of ocular emergencies, triage and the appropriate response. Topics will also include common ocular surgical procedures, first aid treatment and physician referral procedures.

Prerequisite: Eligible for ENG\*101 or ENG\*101E

### *General Objectives of the Course*

Upon completion of this course, the learner should be able to:

1. Describe the basic functions and processes of each body system
2. Describe the structure and function of the major parts of the eye, eyelids and adnexa
3. List and describe the cranial nerves associated with the eye and adnexa
4. Describe the physiology of color vision
5. List and explain the most common pathways of disease and infection transmission
6. Describe the proper technique for collecting histological specimens
7. Explain and demonstrate the proper methods of disinfection, sterilization and infection control
8. Define the types of microorganisms: bacterium, virus, fungus, protozoan
9. Implement emergency procedures and administer first aid, including cardiopulmonary resuscitation
10. Measure and record vital signs
11. Differentiate between inflammation and infection
12. Describe frequently encountered eye conditions
13. Describe the ocular manifestations of at least ten common systemic diseases
14. Demonstrate the basic elements of contact lens care and instruction
15. Effectively interact with others in a verbal and written manner

Unit #	Instructional Unit	Specific Objectives of Unit Upon completion of this course the learner will be able to:
1.	General Anatomy and Physiology	1. Describe the basic functions and processes of each body system
2.	Ocular Anatomy and Physiology	1. Describe the structure and function of the major parts of the internal and external eye and adnexa 2. List and describe the cranial nerves that stimulate the eye and adnexa
3.	Microbiology	1. Define the types of microorganisms: bacterium, virus, fungus, protozoan  2. Explain common pathways of disease transmission  3. Assist in the collection of conjunctival and corneal specimens  4. Describe and follow universal precautions and infection control measures to maintain clinical asepsis
5.	CPR	1. Implement emergency procedures and administer first aid, including

		<p>cardiopulmonary resuscitation</p> <p>2. Maintain control of emergency situations</p> <p>3. Provide reassurance and support to patient</p>
6.	Vital Signs	1. Measure and record vital signs (i.e., blood pressure, pulse, and respiration rate)
7.	Eye Diseases	<p>1. Differentiate between inflammation and infection</p> <p>2. Describe frequently encountered eye conditions</p>
8.	Systemic Diseases and the Eye	1. Describe the ocular manifestations of at least ten systemic diseases
9.	Contact Lenses	<p>1. Instruct the patient on the insertion and removal of lenses</p> <p>2. Explain contact lens types and wearing schedules</p> <p>3. Explain care systems</p> <p>4. Explain the need for scheduled follow-up visits</p> <p>5. Explain contraindications, symptoms, and the fitting</p>
10.	General Psychology	<p>1. Listen and observe, respond to verbal and non-verbal communication, demonstrate courtesy and tact</p> <p>2. Effectively interact with others in an oral and written manner</p> <p>3. Project a positive image of the profession</p> <p>4. Keep personnel biases from interfering with the performance of assigned duties</p>

## COURSE SYLLABUS

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

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

Office- (516) 739-6600

Office Hours: By appointment

Email: [jbacotti@mxcc.commnet.edu](mailto:jbacotti@mxcc.commnet.edu)

### Class Cancellation Policy:

Class Cancellation will be determined by the College administration, and will be disseminated by a variety of media outlets including both television and radio. (See information above)

### 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

## IMPORTANT COLLEGE POLICIES!! PLEASE READ CAREFULLY!

For information about the college's policies and procedures regarding academic honesty, accessibility/disability services, attendance, audio-recording in the classroom, grade appeals, plagiarism, religious accommodations, weather and emergency closings, and more, please go to the following website: [www.mxcc.edu/catalog/syllabus-policies/](http://www.mxcc.edu/catalog/syllabus-policies/) or scan the QR code with your smart phone. Also, please become familiar with the policies regarding nondiscrimination, sexual misconduct, and general student conduct at the following website: [www.mxcc.edu/nondiscrimination/](http://www.mxcc.edu/nondiscrimination/).



## NON-DISCRIMINATION STATEMENT

*Middlesex Community College does not discriminate on the basis of race, color, religious creed, age, sex, national origin, marital status, ancestry, present or past history of mental disorder, learning disability or physical disability, sexual orientation, gender identity and expression or genetic information in its programs and activities. In addition, the College does not discriminate in employment on the additional basis of veteran status or criminal record. The following people*

*have been designated to handle inquiries or complaints regarding non-discrimination policies and practices:*

*Primary Title IX Coordinator*

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

*Secondary Title IX Coordinator*

*Ms. Queen Fordham, Coordinator of the Meriden Center Welcome Desk  
qfordham@mxc.edu; 203-608-3011.*