**ESSEX COUNTY COLLEGE**

**Nursing and Allied Health Division**

**OPH 203 *–* Contact Lens I**

**Course Outline**

**Course Number & Name:**  OPH 203 Contact Lens I

**Credit Hours:**  3.0 **Contact Hours:**  3.0 **Lecture:** 3.0 **Lab:**  N/A **Other:**  N/A

**Prerequisites**:  Grade of “C” or better in OPH 127 or placement

**Co-requisites:** OPH 201 **Concurrent Courses:** None

**Course Outline Revision Date:** Fall 2010

**Course Description:** This course provides an introduction to contact lenses. Topics include: The history of contact lenses, lens materials, the anatomy and physiology of the cornea, corneal topography and its relation to lens design. Instruction will include use of the Keratometer and Slit Lamp as well as the procedures required in the design and inspection of hard contact lenses.

**Course Goals:** Upon successful completion of this course, students should be able to do the following:

1. discuss the history of and the materials from which contact lens are made;

2. use contact lens equipment and apply their functions to the patient;

3. successfully fit contact lens to a patient; and

4. name and describe the various types of corneal pathologies and how various pharmaceuticals are prescribed.

**Measurable Course Performance Objectives (MPOs)**: Upon successful completion of this course, students should specifically be able to do the following:

1. Discuss the history of and the materials from which contact lens are made:

1.1 *identify major contributors to the development of contact lenses;*

1.2 *discuss the different types of sclera lenses and give indications for their use;*

1.3 *list the various types of corneal lenses, give indications and contra-indications for their use and discuss the optical, cosmetic and physical advantages of wearing contact lenses instead of spectacles;* and

1.4 *list the parameters of a corneal contact lens and then describe the function and list the specifications and tolerance for each*

2. Use contact lens equipment and apply their functions to the patient:

2.1 *obtain and record accurate readings using the keratometer and recognize and measure anterior corneal astigmatism;* and

2.2 *describe the various parts of the slit lamp and discuss its function in the fitting of contact lenses*

**Measurable Course Performance Objectives (MPOs)** (continued):

3. Successfully fit contact lens to a patient;

3.1 *determine the (Central Posterior Curve) CPC chosen as a starting point for fitting hard contact lenses;* and

3.2 *solve related problems if any arise*

4. Name and describe the various types of corneal pathologies and how various pharmaceuticals are prescribed:

4.1 *name and describe various corneal pathologies;*

4.2 *name the more commonly used drugs in ophthalmological practice;*

4.3 *explain the uses of ophthalmic drugs;* and

4.4 *name ingredients in contact lens solution*

**Methods of Instruction**: Instruction will consist of lectures and demonstrations.

**Outcomes Assessment:**  Test and exam questions are blueprinted to course objectives. Data is collected and analyzed to determine the level of student performance on these assessment instruments in regards to meeting course objectives. The results of this data analysis are used to guide necessary pedagogical and/or curricular revisions.

**Course Requirements:** All students are required to:

1. Maintain regular attendance.
2. Complete assigned homework on time.
3. Take part in class discussions.
4. Take all tests and exams given.

**Methods of Evaluation:** Final course grades will be computed as follows:

**% of**

**Grading Components final course grade**

* 3 or more Written Tests (dates specified by the instructor) 75%

Tests will show evidence of the extent to which students meet course objectives, including but not limited to identifying and applying concepts, analyzing and solving problems, and stating appropriate conclusions using correct terminology.

* **1 Written Final Exam** **25%**

The same objectives apply as with tests, but it is anticipated that students will provide increased evidence of synthesizing a combination of concepts.

Note: Students must obtain an overall average of at least 70% to pass the course.

**Academic Integrity:** Dishonesty disrupts the search for truth that is inherent in the learning process and so devalues the purpose and the mission of the College.  Academic dishonesty includes, but is not limited to, the following:

* plagiarism – the failure to acknowledge another writer’s words or ideas or to give proper credit to sources of information; could result in a
* cheating – knowingly obtaining or giving unauthorized information on any test/exam or any other academic assignment;
* interference – any interruption of the academic process that prevents others from the proper engagement in learning or teaching; and
* fraud – any act or instance of willful deceit or trickery.

Violations of academic integrity will be dealt with by imposing appropriate sanctions.  Sanctions for acts of academic dishonesty could include the resubmission of an assignment, failure of the test/exam, failure in the course, probation, suspension from the College, and even expulsion from the College.

**Student Code of Conduct:** All students are expected to conduct themselves as responsible and considerate adults who respect the rights of others. Disruptive behavior will not be tolerated. All students are also expected to attend and be on time all class meetings. No cell phones or similar electronic devices are permitted in class. Please refer to the Essex County College student handbook, *Lifeline*, for more specific information about the College’s Code of Conduct and attendance requirements.

**Course Content Outline:** based on the text **Contact Lenses: Procedures and Techniques**, 2nd edition, by Lowther & Snyder; published by Butterworth – Heinemann; ISBN-13#: 9780409950120

**Week Class Topics/Reading Assignments**

1 History of contact lenses

2 Contact lens terminology and types

3 Contact lens materials and parameters

4 Keratometer and corneal topography

5 Review

**Test #1**

6 RGP calculations

7 Eyelids, tear film, and lacrimal system

8 Cornea

9 Review

**Test #2**

10 Biomicroscope

11 Verification, manufacture and inspection of RGPs

12 Soft contact lenses

Preliminary evaluation

13 Review

**Test #3**

14 Review for the Final Exam

15 **Final Exam**