**ESSEX COUNTY COLLEGE**

**Nursing and Allied Health Division**

**OPH 201 *–* Ophthalmic Dispensing I**

**Course Outline**

**Course Number & Name:**  OPH 201 Ophthalmic Dispensing I

**Credit Hours:**  5.0 **Contact Hours:**  7.5 **Lecture:** 5.0 **Lab:**  N/A **Other:**  N/A

**Prerequisites**:   Grades of “C” or better in OPH 126 and OPH 127 or placement

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

**Course Outline Revision Date:** Fall 2010

**Course Description:** An examination of professional ethics, practices and responsibilities will be followed by an evaluation of absorptive lenses and optical coatings. The calculation and elimination of vertical imbalance, by various methods, is thoroughly presented. Lecture and laboratory sessions include techniques in ocular and facial measurements for single vision, multifocal and lenses to correct Aphakia. Included are proper techniques in adjusting plastic frames and the neutralizing and analysis of completed spectacles. Practical problems are offered with the goal being development of the skills necessary at the dispensing table.

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

1. discuss the history, function, and ethics of Ophthalmic Dispensing;
2. explain and apply optical formulae used in the proper dispensing of ophthalmic appliances; and

1. practically apply acquired knowledge and skills encompassing all of the optical tools of the Ophthalmic Dispensing trade.

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

1. Discuss the history, function, and ethics of Ophthalmic Dispensing:
2. *discuss the history, functions and ethics of the Ophthalmic Dispensing profession;*
3. *describe the spectrum and explain the use of various types of absorptive lenses to protect the wearer from unwanted transmissions (e.g., UV, IR, spectacle reflections, and glare);* and
4. *explain the use of photochromic lenses, identify their manufacturers, and describe their properties in different light and temperature conditions*

2. Explain and apply optical formulae used in the proper dispensing of ophthalmic appliances:

2.1 *use relevant calculations to adjust the prescription of the Aphakic patient as part of the fitting procedures;* and

2.2 *explain and demonstrate the ability to recognize and correct for vertical imbalance by making necessary calculations and demonstrating the proper way to implement the correction utilizing the various methods available*

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

3. Practically apply acquired knowledge and skills encompassing all of the optical tools of the Ophthalmic Dispensing trade:

3.1 *utilize the necessary tools and devices used in modifying and adapting ophthalmic appliances to fit the patient’s needs at the dispensing table;*

3.2 *accurately analyze and interpret lens prescriptions and neutralization of prescriptions in unknown eyeglasses;*

3.3 *determine the placement of multifocal segments on eyeglasses taking into consideration the way they are fitted to the patient;* and

3.4 *perform the adjustments necessary to properly position and maintain the fit of an eyeglass frame on a patient*

**Methods of Instruction**: Instruction will consist of lectures, demonstrations, guest speakers, and audio-visual aids.

**Outcomes Assessment:**  Test and exam questions are blueprinted to course objectives. Neutralization projects and fitting projects are evaluated using checklist rubrics to determine student mastery of 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 and fitting and neutralization projects 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 Written Tests and 1 Written Final Exam  70%

(dates specified by the instructor)

The tests and the exam 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. The exam will indicate increased understanding and synthesis of course content/material.

* **6 Fitting Projects and 6 Neutralization Projects** **30%**

The students will demonstrate the ability to apply their knowledge and acquired skills (course objectives) in these practical projects, which require the expert use of the lensometer, lens clock, pupillometer, and all of the optical tools of the trade at the dispensing table.

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 **System for Ophthalmic Dispensing**, 3rd edition, by Brooks, Borish; published by Butterworth and Heinemann; ISBN #: 13 978-0-7506-7480-5

**Week Class Topics/Reading Assignments**

1. Review of material covered in OPH 126 and OPH 127

Read chapters 12, 13, 14, 15 & 16

1. Continue review; vertical imbalance and slab-off

Read chapter 21

1. History and ethics; frames types and terminology; start fitting and neutralization projects

Read chapters 1 & 2

1. Review and **Test 1**
2. Absorptive lenses

Read chapter 22

1. Absorptive lenses (continued)

Answer chapter 22 questions

7 Fitting routine and fitting triangle; continue fitting and neutralization projects

Read chapter 9

8 Measuring interpupillary distances

Review for Test 2

Read chapter 3 and answer questions

9 **Test 2**

aphakic lenses & vertex distance measurements

Read chapters 14 & 17

10 Vertical optical centering and the optical axis; continue fitting and neutralization projects

Read chapter 17

11 Use of mental tools and role playing at the dispensing table; continue fitting and neutralization projects

12 Preparation of laboratory work order & proper phone techniques; continue fitting and neutralization projects

Review for Test 3

13 **Test 3**

**Complete neutralization projects**

14 Review for the Final Exam

**Complete fitting projects**

15 **Final Exam**