**ESSEX COUNTY COLLEGE**

**Nursing and Allied Health Division**

**OPH 202 *–* Ophthalmic Dispensing II**

**Course Outline**

**Course Number & Name:**  OPH 202 Ophthalmic Dispensing II

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

**Prerequisites**:   Grade of a “C” or better in OPH 201 or placement

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

**Course Outline Revision Date:** Fall 2010

**Course Description:** The psychology of dispensing will be stressed along with the procedures for proper management of the Presbyopic and low-vision patient. The interpretation of complex prescriptions, i.e., the effect of changing lens position, crossing cylinders, and the design of Iseikonic lenses, is covered. Instruction includes the fitting of progressive lenses, eyeglasses for occupational and vocational use, and the considerations of style and fashion. Lecture and practical sessions include techniques in adjusting metal and rimless frames, analyzing and neutralizing unknown spectacles, frame repairs, and classroom participation in simulated case histories.

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

1. describe and explain the psychology of frame and lens selection for the patient, including how the prescription relates to these decisions, and the 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. Describe and explain the psychology of frame and lens selection for the patient, including how the prescription relates to these decisions, and the ethics of Ophthalmic Dispensing:

1.1 *demonstrate the attitudes and psychology required in servicing the public at the dispensing table;*

1.2 *describe and explain the use of the moisture chamber, ptosis crutch, magnifiers, loupes and other low-vision aids;*

1.3 *discuss the dispenser’s role in assisting the consumer in their choice of vocational and sports eyewear;* and

1.4 *explain the fundamentals of office management and inventory control*

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

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

2.1 *calculate the relationship of amplitude of accommodation to near point, dioptric demand to task distance, and recommended add power, taking into consideration the range of clear vision/blur vision zones and field of view through the segment;*

2.2 *explain the relationship of accommodation and convergence and address the problems of the middle and advanced presbyope*;

2.3 *perform calculations involving the effect of tilted lenses and the combination of obliquely crossed cylinder lenses*; and

2.4 *apply the formulae used in association with Iseikonic lenses and to understand the concepts involved in Ultrathin type, Aphakic lenses*

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

3.1 *describe and explain several types of invisible and progressive-type multifocals and demonstrate the ability to properly place the progressive multifocal for optimum use by the wearer;*

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

3.3 *use the necessary tools and devices to fit the patient’s needs at the dispensing table*

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

**Outcomes Assessment:**  Test and exam questions are blueprinted to course objectives. Neutralization projects and fitting projects and the term paper are evaluated using 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, 1 Written Final Exam, and Term Paper 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. The term paper will be written on a subject involving current issues or technologies involving the design, manufacture, or dispensing of eyewear, frames, or lenses and related to course objectives. The Term Paper will also include a summary presentation of the findings to the rest of the class.

* **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 Optical devices, ptosis crutch, moisture chamber, occluders, and loupes are presented and their uses are described

 Read chapters 7 & 8

2 Problems of the Presbyope are presented; problems involving amplitude of accommodation, near point, and intermediate blur distances are solved

 Read chapters 9 & 10

3 The relationship between accommodation and convergence is discussed and bifocal inset according to prescription is presented; low-vision aids, both optical and non-optical, are presented and their uses are discussed along with the proper management of the low-vision patient

4 Review and **Test 1**

5 The presentation and analysis of the different types of progressive lenses with a demonstration of their recognition; instruction and practice in their proper fitting and measurement techniques; practice projects are assigned (metal frame must be used)

 Read chapters 18, 19 & 20

6 Neutralization projects are assigned; discussion on the needs of the individual in the selection and fitting of various types of multifocals

7 Demonstration and practice in frame repairing, soldering, and hinge replacement; students will be required to demonstrate good technique in the use of tools to accomplish proper frame adjustments; field trip to a local frame manufacturing plant

8 A thorough presentation on two methods of calculating the resultant prescription when two cylinders are combined at an oblique axis; a practical problem is assigned utilizing these techniques; the study and calculation of the effects of tilting a lens improperly before the eye

9 Review and **Test 2**

10 A discussion on vocational and sports eyewear is presented along with the evaluation of different types of eye protection and the dispenser’s role in the selection; practical projects in the fitting of metal and rimless eyewear are assigned

11 Presentation of the fundamentals of office management and inventory control; class discussion and role-playing activities emulate conditions found in the field; recognition and neutralization of higher-power lenses; the study and calculation of the effects of tilting a lens improperly before the eye (continued)

**Week Class Topics/Reading Assignments**

12 Presentation of Iseikonic and Ultrathin lenses; assignment of a project to be completed using the associated formula; instruction in how to prepare for the State Licensing Examination and a overall review of the last two semesters of instruction

 **Completion of the assignment term papers and presentation** of those deserving publication

13 Review and **Test 3**

 **Complete neutralization projects**

14 Review for the Final Exam

 **Complete fitting projects**

15 **Final Exam**