I. Basic course Information

A. Course Number and Title: OPTH-201 Contact Lenses II

B. Modified Course

C. Date of Proposal: Semester: Spring Year: 2017

D. Effective Term: 2017

E. Sponsoring Department: Health Science Education

F. Semester Credit Hours: 3

G. Weekly Contact Hours:
   Lecture: 2
   Laboratory: 2
   Out of class student work per week: 4

H. Prerequisites/Corequisites: OPTH-200 Contact Lenses I

I. Laboratory Fees: Yes

J. Department Chairperson: Beryl Stetson, 908-526-1200, ext. 8877

II. Catalog Description

Prerequisite: OPTH-200 Contact Lenses I

This course includes clinical application of corneal measurements; lens/cornea evaluation criteria; lens selection parameters; theory of over-refraction; lens verification techniques and tolerances; patient education and principles of practice management.
III. Statement of Course Need:

A. This is a required course for the Ophthalmic Science –AAS degree.
B. This course is not designed for transfer.

IV. Place of Course in College Curriculum

A. Free Elective
B. This is a required course for the Ophthalmic Science –AAS degree.

V. Outline of Course Content

A. Patient pre-fit evaluation: General history, ocular history, visual habits, occupational/vocational requirements, environmental conditions, refractive error status, visual acuity assessment.

B. Biomicroscopy: Illumination/magnification fundamentals, usage and application of instrument, ocular health screening, tear film evaluation, fluorescein instillation, tear break-up time, tear, meniscus evaluation.

C. Keratometry: Operation and application of instrument, calibration, patient measurements and recording.

D. Lens Selection: Material, power, curve determination, diameter, patient insertion and removal techniques.


F. Subjective acuity assessment, principles of over-refraction, operation of the phoropter, determination of sphere, cylinder, axis, determination of final lens power and parameters, lens ordering.

G. Lens Verification: Operation and application of the radiuscope, thickness gauge, diameter gauge and measuring magnifier. Disinfection and storage of trial lenses.

H. Patient Evaluation: Lens care and handling, insertion/removal, disinfection procedures, cleaning procedures, lens storage, lens solutions.

I. Patient Follow-up Care: Lens evaluation, ocular health screening, reinforcement of lens care and handling. Practice management principles.

VI. General Educational and Course Learning Outcomes

A. General Education Learning Outcomes:

At the completion of the course, students will be able to:
1. Describe the proper use and function of the instrumentation used in fitting contact lenses (GE 4)

B. Course Learning Outcomes

At the completion of the course, students will be able to:

1. Demonstrate knowledge of a healthy/unhealthy cornea and/or pre-corneal tear film by utilizing the biomicroscope to perform a pre-fit evaluation according to the procedure presented in lecture.

2. Demonstrate proficiency in the proper utilization of the keratometer to obtain corneal radius measurements within ±.50 diopter of the instructor’s readings.

3. Describe and demonstrate the correct procedure for insertion and removal of any type of contact lens according to the procedures outlined in the text.

4. Analyze the contact lens/corneal relationship according to the parameters presented in lecture by manipulating the biomicroscope and examining the lens in situ.

5. Demonstrate proficiency in the evaluation skills required in determining the RGP/Corneal relationship according to the fluorescein pattern presented in situ.

6. Operate the phoropter to accurately over-refract a contact lens patient according to the procedure outlined in lecture and within ±.50 diopter of the instructor’s manifest prescription.

7. Demonstrate knowledge of and proficiency at utilizing the appropriate instrumentation of the profession to verify the parameters of a rigid contact lens with the applicable A.N.S.I. specification.

8. Apply the proper knowledge of patient education techniques for insertion, removal, cleaning, disinfecting and storage of all categories of contact lenses as outlined in lecture.

C. Assessment Instruments

1. laboratory products
2. demonstrations
3. written examinations

VII. Grade Determinants

A. examinations

Given the goals and outcomes described above, LIST the primary formats, modes, and methods for teaching and learning that may be used in the course:

A. lecture/discussion
B. small group work  
C. computer assisted instruction  
D. laboratory  
E. simulation/role playing  

VIII. Texts and Materials  

B. film and video  
C. power point presentations  
D. web sources  

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)  

XI. Resources  

A. Computer  
B. Projection equipment  
C. Contact lens laboratory. The laboratory needs to be equipped with a sink, refraction equipment, contact lenses, biomicroscopes and keratometer along with numerous hand instruments.