

Subject Description Form

Subject Code	SO3002
Subject Title	Ophthalmic Optics and Dispensing 2
Credit Value	3
Level	3
Pre-requisite	Students are required to have attempted: Ophthalmic Optics and Dispensing 1 (SO3001)
Objectives	To familiarize the students with advanced topics in ophthalmic optics and dispensing
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a. discuss the parameters related to spectacle lens design b. assess the image quality of a lens with a given lens design c. discuss and make appropriate recommendations for uses of tinted ophthalmic lenses d. discuss, with appropriate terminology, the optical principles of bifocal, trifocal and multifocal lenses e. measure related parameters and perform fitting of bifocal, trifocal and multifocal lenses to maximize visual efficiency and wearing comfort f. evaluate the optical and fitting suitability of a given pair of spectacles g. analyze and solve problems related to the effects of lens effectivity for accommodation demands, differential cylinders and prisms h. adjust spectacle frames for proper fitting and give appropriate instruction in the safety and efficiency of spectacles i. perform lens laying-off and edging for bifocal and multifocal spectacles
Subject Synopsis/ Indicative Syllabus	<p>Spectacle selection and fitting Tinted lenses Spectacle lens design Multifocals Bifocals and trifocals Lens effectivity</p>
Teaching/Learning Methodology	<p>Lecture + Tutorial: Principles of ophthalmic optics and dispensing will be covered during lectures. Calculations will be demonstrated in-class and work problems will be solved through classroom activities.</p> <p>E-Learning: Discussion forum on relevant issue will be organized follows each lecture. The forum will be hosted by different teams of students and monitored by the subject leader.</p> <p>Laboratory: Introduction and demonstration of individual topics will be delivered at the beginning of each lab. The students are required to show competency in the techniques taught.</p>

Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)								
			a	b	c	d	e	f	g	h	i
	1. Coursework (tests)	35	✓	✓	✓	✓		✓	✓	✓	
	2. Practical	15					✓	✓		✓	✓
	3. Examination	50	✓	✓	✓	✓		✓	✓	✓	✓
	Total	100									
<p>Coursework: Assignments and exams will be given to monitor the learning process of the students.</p> <p>Practical Exam: A practical exam will be given at the end of the semester to test the student's competency of basic ophthalmic dispensing skills covered during the semester.</p> <p>Examination: A final written exam will be given at the end of the semester to test the student's understanding of all topics covered during the semester.</p>											
Student Study Effort Required	Class contact:										
	▪ Lecture		22 Hrs.								
	▪ Laboratory		20 Hrs.								
	▪ Tutorial/Seminar		6 Hrs.								
	Other student study effort:										
	▪ Self-study		70 Hrs.								
Total student study effort:		118 Hrs.									
Reading List and References	<p><u>Prescribed Reading</u> Jalie M. Ophthalmic lenses and dispensing. Butterworth-Heinemann. 3rd Edition, 2008. Brooks CW, Borish IM. System for Ophthalmic Dispensing. Butterworth-Heinemann. 3rd Edition. 2007.</p> <p><u>Recommended Reading</u> Jalie, M. The Principles of Ophthalmic Lenses. Association of Dispensing Opticians, London, 1984. Obstfeld H. Spectacle Frames and their Dispensing. W.B. Saunders, London, 1997. Wakefield, KG, Bennett AG. Bennett's Ophthalmic Prescription Work. 3rd ed. Butterworth-Heinemann, 1994.</p>										