

Subject Description Form

Subject Code	SO2D01
Subject Title	Eyes on Vision
Credit Value	3
Level	2
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	<p>Chinese believe that our eyes are “Windows to our souls”. Indeed, the eye is one of the most crucial elements in the way we comprehend our world. However, many people take vision for granted and do not know much, perhaps, apart from what they were taught in secondary schools. The objectives of this subject are to educate students on</p> <ul style="list-style-type: none">• the general characteristics and functions of the eye and how some of the eye structures and functions will change with age and the implications• the importance of our eyes and how to take good care of them by employing good eye hygiene• how to ensure good vision especially in the presence of refractive errors which requires vision correction aids• the pros and cons of different vision correction aids and how to select the one most appropriate to self <p>Students will be more knowledgeable not only about their own eyes, but those of their parents, and in the future, those of their children. They will also be adequately equipped to debunk general myths about the eyes and vision.</p>
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none">a. acquire a general knowledge of the human eye and changes associated with ageingb. understand the types of refractive errors that may render the eye unable to see clearly at distance and/or nearc. know how different types of refractive errors can be corrected and understand the pros and cons of each type of correction to help the eye see clearlyd. use different strategies to plan, design, create, and present information learned on a topic of interest (i.e. on eyes or vision)e. apply what they have learned to improve general eye hygiene and care of eyes, especially if they are wearing contact lensesf. recognize myths on the eyes and vision

Subject Synopsis/ Indicative Syllabus	1. Basic anatomy and physiology of the human eye (0.5 hr)
	2. Introduction to refractive errors of the eye (0.5 hr) <ul style="list-style-type: none"> - Short-sightedness - Long-sightedness - Astigmatism
	3. The ageing eye (1 hr) <ul style="list-style-type: none"> - Anatomical changes of the eye - Presbyopia
	4. Methods for correcting refractive errors (2 hrs) <ul style="list-style-type: none"> - Spectacles: Different types of ophthalmic lenses, surface coating; Do's and Don'ts when selecting frames and lenses - Contact Lenses: Different types of contact lenses; General indications & contraindications of contact lens wear; Do's and Don'ts (Compliance); Pros & Cons; Common adverse events associated with contact lens wear; Care procedures for contact lenses
	5. Beauty contact lenses (1 hr) <ul style="list-style-type: none"> - Increasing popularity as fashion accessories - Dangers associated with improper usage
	6. Regular eye examination (3 hrs) <ul style="list-style-type: none"> - Importance of eye examination to maintain good vision and eye health - Functions of eye examination and role of optometrists and ophthalmologists - Effect of some common systemic disease/condition on eye health (eg. diabetes, hypertension, high cholesterol) - Adequate protection (glasses, contact lenses, sunglasses, umbrella, hat etc.) to prevent eye problems arising from UV radiation
	7. Myths about eye health/condition (7 hrs) <ul style="list-style-type: none"> - Common myths about eyes and vision (e.g. wearing glasses will increase progression of short-sightedness) - Effect of such myths on eye health and vision - Debunking these myths to clarify misconception/misinformation and stress importance of evidence-based approach to science communication on eye health and vision

Teaching/Learning Methodology

Easy to understand approach will be employed to deliver the lectures. **Lectures** will be used to provide factual information, to introduce and explore key issues of main topics. They will also be the primary forum for staff to encourage critical thinking using cases, examples and evidence from the literature and also for students and staff to explore ideas where appropriate.

Tutorials/Online discussion (e.g. Blackboard, emails) will be a platform for students to play an active role in their learning by reflecting, discussing and/or debating on issues and students will learn to take responsibility for their own learning.

Poster/Video (or PowerPoint show) Project will give students (small groups) the opportunity to discuss, design, and produce different modes of presenting information, instructions or advice. This will also allow students to collaborate, to work as a team to plan what to do and design and produce the best strategy to deliver the product of their collaboration, which can include instructions, health tips etc.

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
1. Quiz/Test	40	✓	✓	✓		✓	✓
2. Class attendance/participation	15	✓	✓	✓	✓	✓	✓
3. Poster/Video Project	30	*	*	*	✓	*	✓
4. Reflective Writing	15	✓	✓	✓	✓	✓	✓
Total	100						

* depending on the topic selected by the students, these objectives may also be applicable)

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Quiz/Test will be conducted to encourage students to learn as they progress. MCQ and/or short-answer questions will be used to assess students' mastery of details and specific knowledge.

Poster/Video Project. Apart from staff assessment, peers will be invited to grade the final product of each project. Students will be encouraged to design creative ways to demonstrate what they have learned from their discussion and online research. Knowing that their audience may extend beyond the staff to peers will promote student ownership of their work. This will be a motivation for students to produce a good quality or a higher standard product on their selected topic.

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	<p>Reflective Writing. Students will be required to submit RW assignment/s, reflecting on what they have learned from the subject and how the knowledge has impacted their lives. This exercise may be in the form of one RW (5-6 pages, double line spacing) towards the end of the semester, or a few (2-4) short (1-2 pages) RW at the end of 2-4 selected lectures.</p>
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Student Study Effort Expected	Class contact:	
	• Lectures	15 Hrs.
	• Tutorials	9 Hrs.
	• Poster/Video presentation (+ peer & staff onsite assessment)	15 Hrs.
	Other student study effort:	
	• Preparing reflective writing	20 Hrs.
	• Meetings/ Self study/Online search for information	60 Hrs.
	Total student study effort	119 Hrs.
Reading List and References	<ul style="list-style-type: none"> • Atchison DA, Smith G. Optics of the human eye. Oxford: Butterworth-Heinemann, 2000 • Grierson I. The eye book: eyes and eye problems explained. Liverpool University Press, England 2000 • Oyster CW. The human eye: structure and function. Sunderland, Mass. Sinauer Associates, 1999 <p>+ selected relevant journal articles</p>	