SO2D01

Eyes on Vision

Subject Leader

Dr Lydia Yu

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School of Optometry

The Hong Kong Polytechnic University

About me

- Graduated from School of Optometry, The Hong Kong Polytechnic University
- Completed PhD from Department of Ophthalmology, The University of Hong Kong
- Currently working in School of Optometry as Assistant Professor of Practice

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Let's know more about your classmates!

- Which Faculty are you from?
- Which year are you in your programme?

Go to
pigeonhole.at

Enter passcode

93YXHS

https://pigeonhole.at/93YXHS

Learning Outcomes

Upon completion of the subject, students will be able to:

a. acquire a general knowledge of the **human eye structures and functions**

b. estimate the **resolution capability of the human eye** and describe **how vision can be measured**

c. recognize how deficiency in **depth perception and color vision** will affect our daily lives

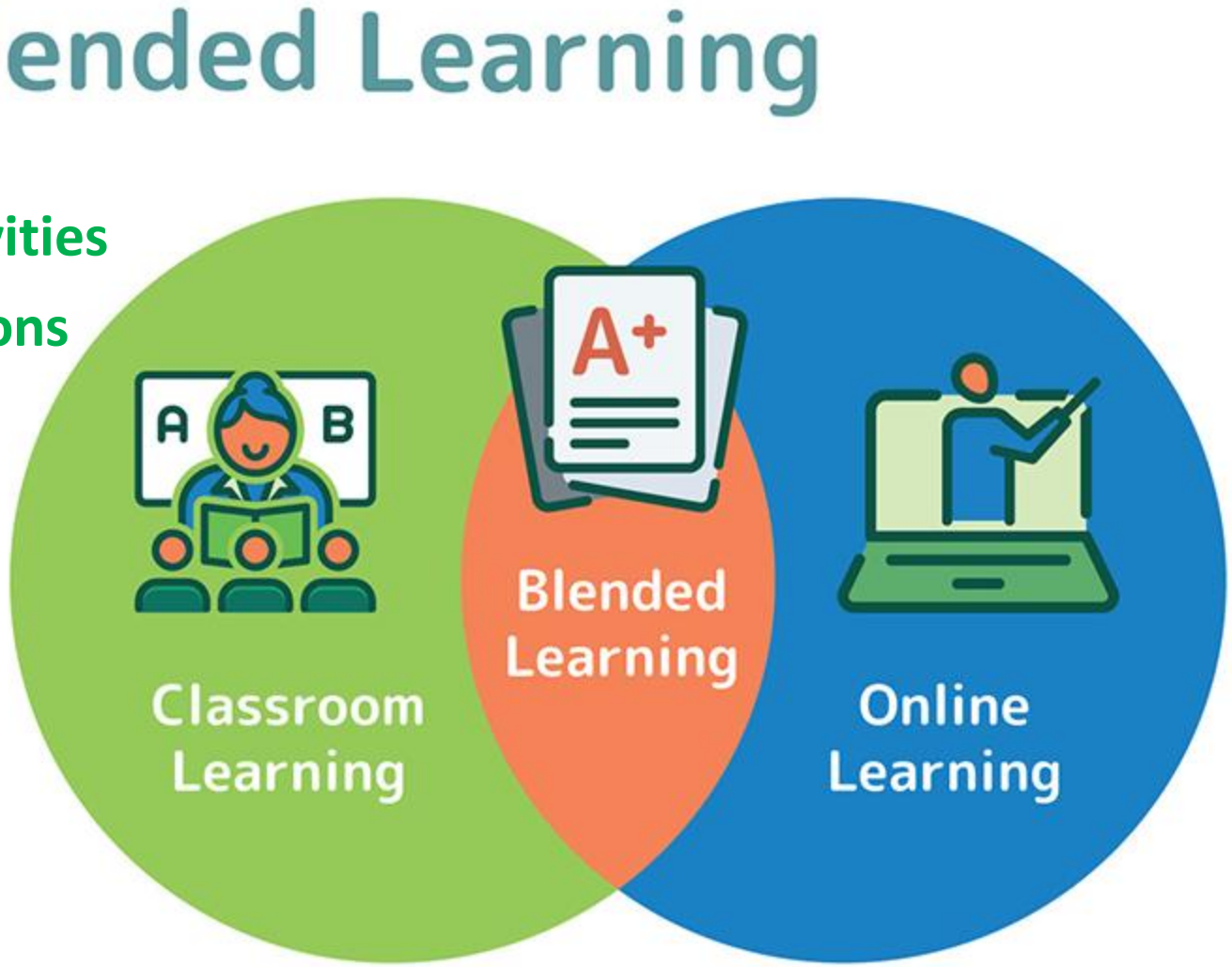
d. identify **common eye conditions** and **eye diseases including refractive errors and ways of corrections**

e. apply approaches to **protect the eyes from injury, improve general eye hygiene and take good care of the eyes**

f. use different strategies to **plan, design, create, and present information** learned on a topic of interest (i.e. on eyes or vision)

g. evaluate information from a variety of sources and **debunk myths about the eyes and vision**

How is this course delivered?



- Mini-lectures
- Tutorials & activities
- Project discussions

- MOOC ‘How We See the World: Visual Function and Eye Health’
- SEE 3D Eye Model App
- Project discussions

https://www.3plearning.com/blog/understanding-blended-learning/

Getting Started Video about Eyes on Vision

Available on Blackboard in the course “EYES ON VISION” under the “Content” tab

Course Instructors

Dr. Jessica Neuville

Assistant Professor of Practice

School of Optometry

The Hong Kong Polytechnic University

Dr. Jennifer Bian

Research Assistant Professor

School of Optometry

The Hong Kong Polytechnic University

If you need any technical support regarding joining the MOOC on edX and using the SEE eye model app, please contact Dr Lydia Yu/Dr Jennifer Bian at somooc@polyu.edu.hk.

Steps to enroll the MOOC

1. Go to https://www.edx.org/ and register for a free account.
   Be sure to use your PolyU email address (*studentid*@connect.polyu.hk)
2. You will receive an email with an enrollment link for the course.
   Once you click 'enroll now' you will see the course in your dashboard.
   Each enrollment link can only be used once, so don't share the link!
3. Download the 'Study Eyes Easy' app for the virtual labs
   https://apps.apple.com/hk/app/study-eyes-easy/id1637366051

If you don't have an iPhone or iPad, we will provide you with a PC or Mac computer version. Please email Dr Yu at somooc@polyu.edu.hk with Subject " **Request for SEE Eye Model computer version**".

Step 1

Step 3

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By creating an account, you agree to the Terms of Service and Honor Code and you acknowledge that edX and each Member process your personal data in accordance with the Privacy Policy.

Create an account for free

You should have received an email by now

Hello [redacted]

Welcome to the course *Eyes on Vision*! This course will use a blended learning approach. The online component of the course is on the edX platform. You will need to register for a free account at https://www.edx.org/ using your **PolyU email address** ([redacted]@connect.polyu.hk). Once you have created an account, use the link below to enrol in the course *How We See the World: Visual Function and Eye Health* for **free**.

https://ecommerce.edx.org/coupons/offer/?code=[redacted]
Do not share this link, because it can only be used once!

If you have any questions about how to enrol in the edX course, please reply to this email.

I understand that you just joined our course recently. If you come across any problem with the learning materials covered so far, please do let me know and I will try my best to make sure you catch up with the progress.

Kind regards,
Dr Lydia Yu

Login

How We See the World: Visual Function and Eye Health

HKPolyUx

~~$99.00~~ **Now $0.00**

Enroll Now

Earn a verified certificate in one of our popular courses to advance your career, showcase your accomplishments or enhance your college application.

Why buy a verified certificate?

A verified certificate demonstrates to future employers that you've mastered the course material.

The certificate is officially signed and stamped by the institution that offers the course.

0.1.6 Pre-course survey

Bookmark this page

Before you move on and start Module 1 of **How We See the World**, please take a few minutes tell us about your background, motivation and personal learning aims by filling out this short survey.

This survey is part of a research study on learner motivation and experience in a MOOC course. Please see the Information and Consent Sheet for more information about the study. Your responses will be kept anonymous. We greatly appreciate your participation.

STAFF DEBUG INFO

CONSENT

	Yes	No
I have read the information and consent form. I agree that my survey responses can be used in the study.	◉	○

X.1.2 Post-course survey

Bookmark this page

Before you finish, please fill out this short survey to share your experiences on the course. Your answers will be kept anonymous. Thank you for participating in our study.

MOOC Virtual Labs

1.4.1 Using the SEE 3D model

Bookmark this page

Earlier in this module, to help you understand the structures and functions of the eye, you watched some short animations created using the **SEE (Study Eyes Easy) 3D model**.

In this section, you can download your own copy of the model. You will then use it to further explore the structures and functions of the eye and complete tasks to assess your learning.

There are ten tasks in total. Each task carries one point and counts towards your final grade for this course. You can attempt each task twice.

First, download and install the model from the App Store:

SEE Study Eyes Easy App

Store Mac iPad iPhone Watch AirPods TV 與家居 Apple 獨家 配件 支援服務

App Store 預覽

開啟 Mac App Store 購買和下載 App。

Study Eyes Easy 4+

The Hong Kong Polytechnic University

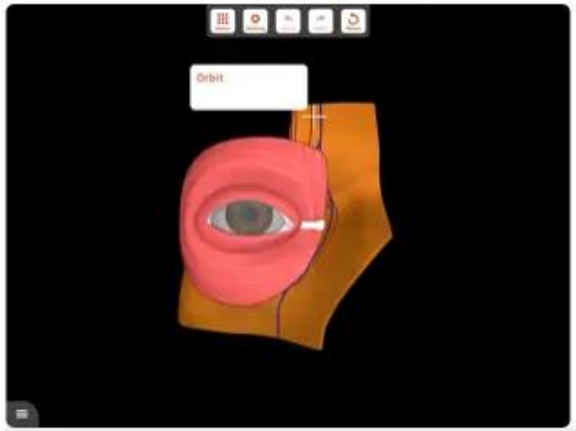
專為 iPad 設計

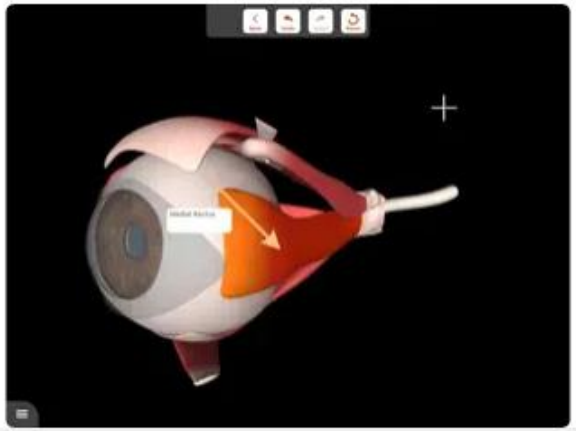
★★★★★ 5.0 • 1 個評分

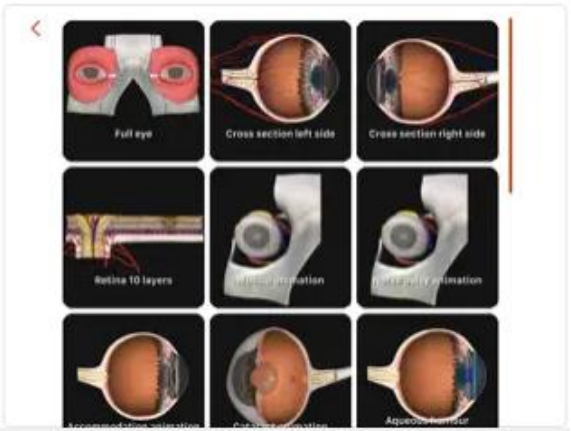
免費

Reminder: If you don't have an iPhone or iPad, we will provide you with a PC or Mac computer version. Please email Dr Yu at somooc@polyu.edu.hk with Subject "**Request for SEE Eye Model computer version**".

螢幕截圖 iPad iPhone







1.4.2 Going further: The lens and cornea

Bookmark this page

Earlier in the module you learned how the *cornea* and *lens* work together to focus light onto the *retina*.

Use the **Full eye** and **Cross section** modes to locate the cornea and lens and explore them further.

Task: The layers of the lens

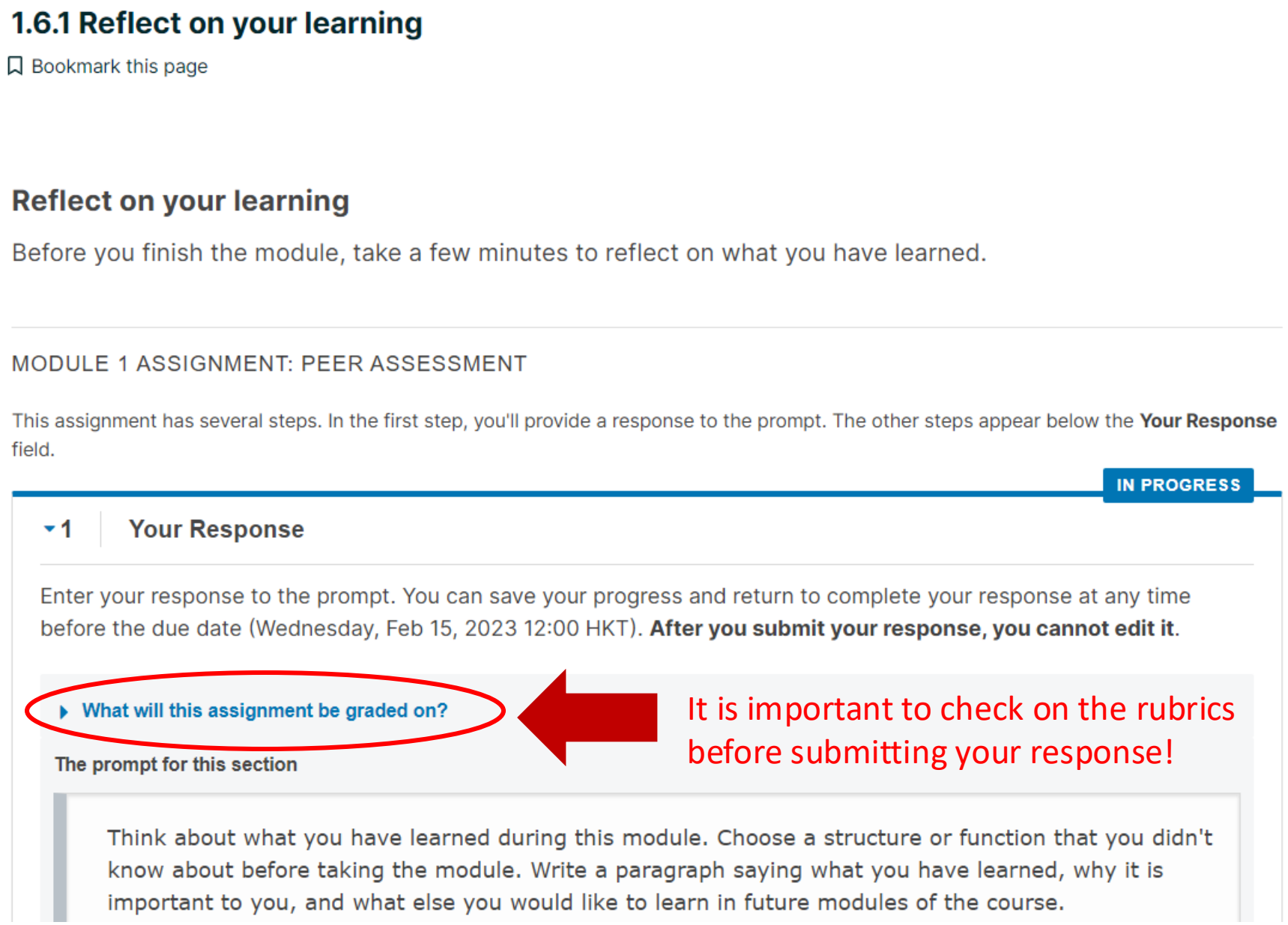
0.0/1.0 point (graded)

Discover and describe the three layers of the lens.

The Select an option is at the centre of the lens. It is surrounded by the Select an option . The outermost coating of the lens is the Select an option .

Submit You have used 0 of 2 attempts Save

MOOC Reflective Writings



Peer assessments for MOOC assignments. You may be graded by online learners from all around the world!

It is important to check on the rubrics before submitting your response!

Reflective Writing

Allow students to reflect or step back and think about what they know or not know

Prompts learning, especially in problem-solving situations

First-person informal reflection for a purpose

Elements of a good RW

- Tell us what and how **YOU** feel about the issue, **YOUR** personal experience
- Reflect on the knowledge learned from the lecture and how it affects what you already know or your current habits
- **APPLICATION** to your daily life, your major degree and people around you
- Take the time and effort to look up the internet for more related information
- Raised potential concerns & propose solutions

Example of a good RW

"…However, the myth was clarified after the lecture. I find that I only noticed the shallow parts of the news articles…

…I tried to find more information on the structure of colour contact lenses…

…I hope my experience of using colour contact lenses will be good in future."

Elements of a poor RW

- Limited due to lack of depth of original idea or reflection
- Comments are brief and more descriptive/reproduction of lecture material
- Describing the learning event but not showing your reaction or what you are going to do with the new information

Example of a poor RW

"This is my third lesson to know about our eyes construction and mechanism.

During today's lesson I have learnt a lot of terminologies of the eye diseases for example, Myopia, Hyperopia and Astigmatism, etc.

Moreover, now I am pretty clear the classification of hyperopia and myopia."

MOOC Assignments

4.6.1 Explore colour vision deficiencies

Bookmark this page

Explore colour vision deficiencies

Before you finish the module, use a free app to explore colour vision deficiencies further and think about some of the difficulties they might cause you in your daily life.

Download the **CV Simulator app**. Use the app to create a photo that illustrates one of the difficulties you would have if you had a specific colour vision deficiency (or, if you have a colour vision deficiency, a photo that illustrates a difficulty you have). Here is one example to get you thinking:

Teaching Schedule

- **Face-to-face (F2F) component**

AND

- **Online component**

We also have learners from all round the world on MOOC!

- Students should attend the F2F classes and obtain at least 80% attendance to pass the subject
- Attendance for project tutorial, preparation and presentation is **mandatory**

Week	DATE	Topics	Venue
1	17 Jan	**Lecture (Face-to-face)** Whole class 4:30 – 6:20 pm Introduction to Eyes on Vision/Technical Instructions for joining MOOC and using the "SEE 3D Eye Model App"/Importance of Eye Examination and Roles of Eye Care Providers Sign up for Tutorial Group on Blackboard **by 22 Jan 2025 midnight**, otherwise will be assigned randomly **MOOC Module 1 Structures and Functions of the Eye (Online)** **Assignments:** Complete the virtual lab and a short reflective writing	N102
2	24 Jan	**Tutorial (Face-to-face)** Group A: 4:30 - 5:20 pm; Group B 5:30 – 6:20 pm Q&A about MOOC module 1 Activity: Hands-on eye models and using the "SEE 3D Eye Model App" **MOOC Module 2 The Resolution of the Eye (Online)** **Assignments:** Complete the virtual lab and solve the problem about screen size	N102
	31 Jan	**Lunar New Year Break (No Class)**	-
3	7 Feb	**Tutorial (Face-to-face)** Group A: 4:30 - 5:20 pm; Group B 5:30 – 6:20 pm Q&A about MOOC module 2 Activity: Measuring own visual acuity **MOOC Module 3 Depth Perception and Module 4 Colour Vision (Online)** **Assignments:** Complete the virtual labs, use the knowledge of depth perception to create a 3D photo and use the "CV Simulator app" to create a photo that illustrates difficulties that a person with colour vision deficiency will have in daily life	N102
4	14 Feb	**Tutorial (Face-to-face)** Group A: 4:30 - 5:20 pm; Group B 5:30 – 6:20 pm Q&A about MOOC modules 3&4 Activity: Testing stereoacuity and applying knowledge and information to own discipline **MOOC Module 5 Common Eye Conditions (Online)** **Assignments:** Complete the virtual lab and a short reflective writing	N102
5	21 Feb	**Tutorial (Face-to-face)** Group A: 4:30 - 5:20 pm; Group B 5:30 – 6:20 pm Q&A about MOOC modules 5 Activity: Immersive experience of eye diseases with augmented reality technology Sign up for Project Group on Blackboard **by 28 Feb 2025 midnight**, otherwise will be assigned randomly **MOOC Module 6 How to Protect Your Eyes (Online)** **Assignments:** Watch a video lecture and complete a short reflective writing	N102
6	28 Feb	**Lecture and Tutorial (Face-to-face)** Whole class 4:30 – 6:20 pm Methods for correcting refractive errors/Selecting spectacle frames and lenses/Do's and Don'ts for contact lens wear Q&A about MOOC module 6	N102
7	7 Mar	**Project Group Discussion/Tutorial (Face-to-face)** Project Groups 1 to 7	N102
8	14 Mar	**Project Group Discussion/Tutorial (Face-to-face)** Project Groups 8 to 14	N102
9	21 Mar	**In-class Quiz** Whole class 4:30 – 5:20 pm	PQ306
10	28 Mar	**Project Group Discussion/Tutorial (Face-to-face) (On request only)**	N102
11	4 Apr	**Ching Ming Festival Public Holiday (No class)**	-
12	11 Apr	**Project Presentation (Face-to-face)** Whole class 4:30 – 6:20 pm	N102
13	18 Apr	**Good Friday Public Holiday (No Class)**	-

Continuous Assessment and Weighting

Subject passing mark: 50% (Grade D)

• MOOC Modules 1-6 (**21 Mar 2025, midnight**)	30%
• Class Participation	10%
• Quiz (**21 Mar 2025 at PQ306**, 30 MCQs, 45 min)	25%
• Project and GenAI log + reflection (Group submission) and Member Contribution Form (individual submission) by **9 Apr 2025 midnight**, peer assessment by **11 Apr 2025 midnight**)	35%
TOTAL	**100%**

You need to pass all components to pass the subject

MOOC Modules

Grading

Your overall grade for this course is out of **120**. It is calculated as the sum of your six module **Assignment** scores, your five **Virtual lab** scores from Modules 1 to 5, and your score for viewing the **Lecture Video** in Module 6.

Passing mark:
60 out of 120, i.e. 50%

	Module 1	Module 2	Module 3	Module 4	Module 5	Module 6	Total
Assignment	/10	/10	/10	/10	/10	/10	**/60**
Virtual lab	/10	/10	/10	/10	/10		**/50**
Lecture video						/10	**/10**

To pass the course with a grade **C** and receive a certificate, you need to complete all of the assessed activities *and* achieve a total score of between **60 and 69%**.

For a grade **B**, you need a score of **70 to 79%**, while an **A** grade is for scores of **80% and above**.

Use the **Progress** tab to keep track of your scores for the activities in each module.

Class Participation

- Must obtain at least 80% class attendance
- Can be excused due to sickness or special circumstances, must inform subject leader through email at lydia.yu@polyu.edu.hk before lesson starts, otherwise considered absent from class
- Attendance for project tutorial, preparation and presentation is **mandatory**

In-class Quiz at PQ306- 30 MCQs, 45 min

- Logon to LEARN@PolyU (Blackboard)
- Go to the course “EYES ON VISION”
- Click “Assessments”
- A link to “**EoV Online Quiz 2024-25 Semester 2**” will be available on **21 Mar 2025 at 4:30 pm**
- Only **ONE attempt** for this quiz
- Cannot go back to the previous question after submitting the answer
- Think carefully before going to the next questions.

Passing mark: 50%

Assessments

EoV online quiz 2024-25 Semester 2

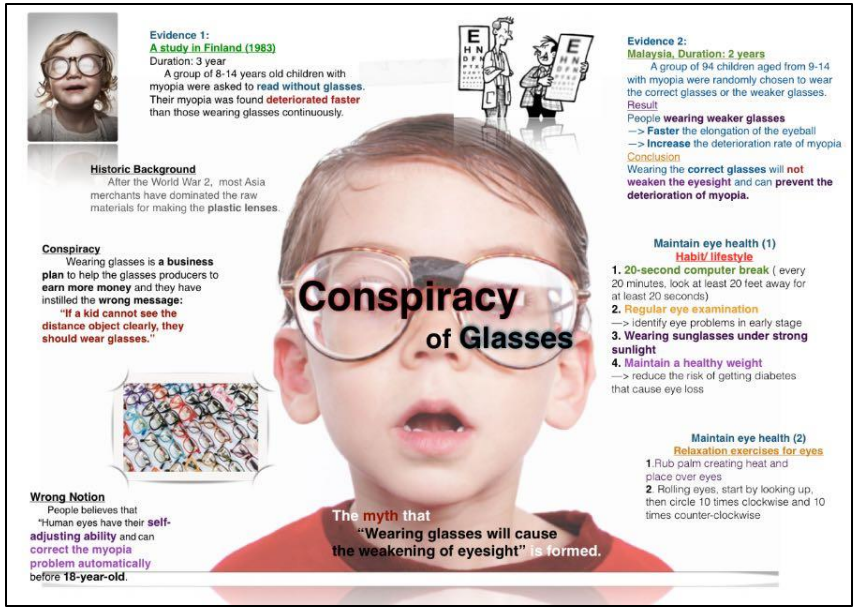
Time limit: 45 minutes

You have 45 minutes to complete the quiz. You cannot go back to the previous question after submitting the answer. Please think carefully before you go to the next questions. There will only be one attempt for this quiz. This test contributes 25% of the EoV subject overall grade. If you encounter any technical problem, please let Dr. Lydia Yu know immediately.

Project (35% subject weighting)

- Work in groups of 5-6
- Submit one piece of work per group
- A Video Clip/Powerpoint Slide Show
  - We welcome any other creative ideas, please discuss with subject leader/instructors first

Group 5 project



Potential topics

Examples:

- Instructions or Procedures (e.g. how/when to wear contact lens)
- Debunk myth on eyes and vision
- How to protect eyes from UV
- Occupational visual hazards etc. …

Any topic related to eyes and vision (BUT avoid professional topics!)

Be creative!

Examples are available on Blackboard “Content” tab under the folder named “Project examples”

Video clip/Powerpoint slide show duration: maximum 5 mins

Example of a video - Occupational Visual Hazards

Example of a video – Do carrots improve eye vision

Be WARNED

Plagiarism will NOT be tolerated!!

Academic dishonesty and plagiarism

- The University takes a very serious view against dishonesty and plagiarism in students' work
- Dishonesty and plagiarized work will lead to downgrading or other disciplinary action as described in the Student Handbook 2024/25

Guidelines on the use of generative AI tools

- Please read the university document “Student Guide on the use of GenAI” on Blackboard to familiarize yourselves with PolyU’s stance of the use of GenAI tools
  - **Declaration:**

I/We declare that Generative AI tools have been used to prepare the submitted work. The Generative AI tools used and the manner in which they were used are as follows: _____

Using Generative AI wisely

DO’s

✓ Use GenAI for brainstorming

✓ Check for factual accuracy of AI-generated content

✓ Use AI-generated content in conjunction with other sources to ensure your work is reliable and well-informed

✓ Include any GenAI assistance in your reference list

DON’Ts

✘ Do NOT rely solely on AI-generated content as the source of information

✘ Do NOT ask GenAI software to write your essays

✘ Do NOT input any personal details or confidential information when using GenAI tools

Progress log and reflection on the use of GenAI

- Please keep a log detailing how you have used GenAI in the project
  - A template will be provided on Blackboard

- Reflect on the use of GenAI in the project work and submit the reflection (200-300 words) and log sheet as a group
  - **The reflection should focus on**
    - how the use of GenAI helped you achieve the intended learning outcomes,
    - the challenges you faced in using the technology (e.g. identifying inaccuracies) and
    - why you chose one tool over another etc.

- Include one slide at the end of the video/presentation listing all the GenAI tools that have been used and showing a summary of key reflections

GenAI tools that may be useful for project

ChatGPT: A language generation model that can be used to generate text, summarize information, or answer questions. You may use it for brainstorming ideas. (https://GenAI.polyu.edu.hk)

Scispace: A tool to help you understand research papers better. It can explain and elaborate most academic texts in simple words. (https://typeset.io/)

Connected Papers: A useful tool to navigate academic publications. You can search and visually discover important recent papers. (https://www.connectedpapers.com/)

Midjourney: An image generation model that can be used to create images of objects, people, or landscapes. (https://www.midjourney.com/home/)

Canva: A graphic design tool that can be used to create professional-looking posters, infographics, and other visual materials. (https://www.canva.com/)

Capcut: An all-in-one creative platform powered by AI that enables video editing and image design. (https://www.capcut.com/)

- Project Group Discussion on potential topics
  - Face-to-face Project Group Discussion/Tutorials as scheduled (see Teaching Schedule)
  - I will attend each group meeting to help you out

  - **COMPULSORY TO ATTEND** as you can only contribute if you attend (will be reflected in the Member contribution form)
  - ALL members need to make full use of the time scheduled to work/discuss together

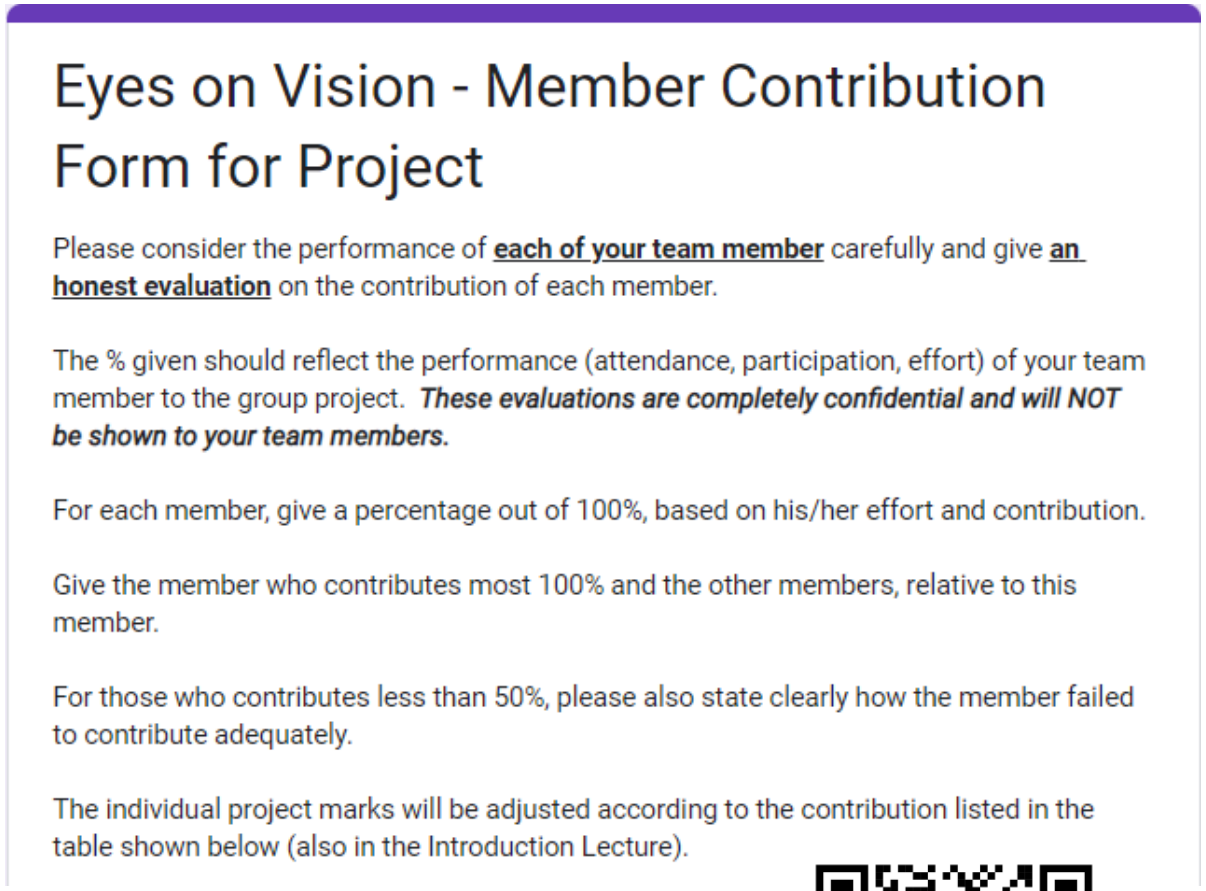
- Assessment of projects
  - Each group will submit a piece of work (i.e. **group, *not individual work***)
  - Peer and staff assessments (Rubrics available on Blackboard)

- Contribution to work submitted by each student will be taken into account
  - **Contribution to group work** (fill in Member Contribution Form, link shown on next slide)
  - No free ride tolerated

To ensure that every team member contributes to the work, final mark of **Project for each member will be based on contribution to the group**, according to fellow team members.

Note:

- Give the member who contributes most 100% and the other members, relative to this member
- If you give a member less than 50%, please state clearly how the member failed to contribute adequately



Eyes on Vision - Member Contribution Form for Project

Please consider the performance of **each of your team member** carefully and give **an honest evaluation** on the contribution of each member.

The % given should reflect the performance (attendance, participation, effort) of your team member to the group project. ***These evaluations are completely confidential and will NOT be shown to your team members.***

For each member, give a percentage out of 100%, based on his/her effort and contribution.

Give the member who contributes most 100% and the other members, relative to this member.

For those who contributes less than 50%, please also state clearly how the member failed to contribute adequately.

The individual project marks will be adjusted according to the contribution listed in the table shown below (also in the Introduction Lecture).

Link to Google form: https://forms.gle/KdFpkuxweQq4i1cQ6

Example of how individual marks will be determined

Example Project marks of 80%

Averaged contribution	Deduction	Final project mark
81-100%	0%	80%
71-80%	10% of 80%	72%
60-70%	20% of 80%	64%
<60%	30% of 80%	56%

Please feel free to contact Dr. Yu if you have any issue with this arrangement or if you have any other suggestion

Assessment of project - Rubrics

Criteria	Excellent 4	Good 3	Satisfactory 2	Pass 1	Failure 0
Information presentation	Very clear, well organized and easy to understand and follow. Information flows very logically. No grammatical or spelling errors.	Clear, organized and easy to understand and follow. Information flows logically. Few minor grammatical or spelling errors.	Mostly clear and easy to understand and follow. Information flows mostly logically. Several noticeable grammatical or spelling errors.	Not very clear at times and some parts not easy to understand and follow. Information flow may not be logical. Numerous grammatical or spelling errors.	Not clear most of the time and is difficult to understand and follow. Information flow not logical. Severe grammatical or spelling errors.
Content	All content highly relevant and connected to the topic. Thorough research with extensive use of credible sources, demonstrating a deep understanding of the topic.	Content mostly relevant and connected to the topic. Adequate research with use of credible sources, demonstrating a good understanding of the topic.	Content somewhat relevant and connected to the topic. Limited research with some credible sources, demonstrating a basic understanding of the topic.	Some content is irrelevant to the topic or its relevance is difficult to determine. Minimal research with few credible sources, demonstrating a lack of understanding of the topic.	Content is mostly irrelevant to the topic or relevance is very difficult to determine. Little to no research with no credible sources, demonstrating a complete lack of understanding of the topic.
Creativity	High level of creativity and originality, with unique and engaging elements that enhance the delivery.	Some creativity and originality, with some engaging elements that enhance the delivery.	Creativity and originality are limited, with few engaging elements to enhance the delivery.	Lacks creativity and originality, with very few or no engaging elements to enhance the delivery.	No creativity or originality to engage the audience or enhance the delivery.
Progress log and reflection on the use of GenAI	Detailed and insightful reflection, with clear explanations of GenAI	Quite detailed and insightful reflections with relatively clear	Satisfactory reflections, with some explanations of GenAI	Reflection is vague with little explanation of GenAI use, and no	Reflection is very brief (or missing) with no explanation of GenAI

	use, ethical considerations, and decision-making.	explanations of GenAI use, ethical considerations and decision-making.	use but little in terms of ethical considerations and decision-making.	ethical considerations or decision-making included.	use or decision-making.
Content usefulness or interest (graded by peers only)	Content is highly useful and interesting and captured the audience's attention.	Content is mostly useful and interesting and captured the audience's attention.	Content is somewhat useful or interesting and somewhat captured the audience's attention.	Content is not very useful or interesting and did not capture the audience's attention.	Content not interesting or useful to the audience.
Content accuracy and time management (graded by staff only)	Content is highly accurate. Effectively used the allotted time and completed the presentation within the time limit.	Content is mostly accurate. Used the allotted time effectively, but may have rushed or lingered on certain points.	Content is somewhat accurate, but some information presented is not backed up by credible sources. Struggled to manage the allotted time, completed the presentation slightly over the time limit.	Content is not very accurate. Poorly managed the allotted time, completed the presentation significantly over the time limit.	Content is not accurate. Any information presented is not backed up. Failed to manage the allotted time, severely overrun the presentation.

Overall marks: _____/20

Grader's feedback on the use of GenAI: (e.g., suggest a useful GenAI tool that was not used in their project, better ways of utilizing the used GenAI tools etc.)

Link to Peer Assessment Google Form: https://forms.gle/raW876ybMwWdu5Ar7

Grader: _____

YOUR responsibility

- **Meet the deadlines.** Penalty (up to 10% deduction of marks) will apply for reminder emails (maximum 1)

- I will provide instructions in-class or by email, on how to submit your project work
  - Uploading to Blackboard
- Please read your email daily and ensure email is working (quotas not exceeded etc)

Deadlines

Please MARK your diary NOW

1. MOOC Online Modules 1-6

- **21 Mar 2025 midnight**

2. In-class Quiz at PQ306

- **21 Mar 2025, link on Blackboard will be available from 4:30 PM**
- **You will have 45 min to complete after clicking the Begin button**

3. Group Project submission, GenAI log + reflection and Individual Member Contribution Form

- **9 Apr 2025 midnight**

4. Peer assessment of <u>ALL projects</u>

- **11 Apr 2025 midnight**

(Please consult Dr Yu if you have any queries about submission)

Penalty for late submission or failure to complete:

1. MOOC Online Modules 1-6
   - 10% deduction if completed within 2 days after the deadline
   - 0 mark for the component if not completed within 2 days after the deadline
2. Project work and GenAI log + reflection (Group submission)
   - Late submission will NOT be entertained
3. Group member contribution form (Individual submission)
   - Will be taken into account and may affect the final marks you would get from the project
   - 5%/10% deduction (late/not submitted)
4. Peer Assessment of **ALL projects** (Individual submission)
   - Downgrade by 1 grade (e.g. B+ to B)

REMEMBER: Email reminders are subject to PENALTIES

10-min Break

- Sign up and join **ONE Tutorial Group** on Blackboard **by 22 Jan 2025midnight**

- Sign up and join **ONE Project Group** on Blackboard **by 28 Feb 2025 midnight**

- Students not joining any group by the deadline will be assigned randomly