

**Think Outside the Box:**

Designing your Engaging

**Interdisciplinary**

**General Education Courses**

**Prof. A. Reza Hoshmand**  
Director of General Education, HKBU

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# Agenda

- 1. The concept of interdisciplinarity*
- 2. General principles & ideas*
- 3. The 8 steps in designing an IGE course*
- 4. Small Group Activity*
- 5. Practical issues*

**What is meant by  
interdisciplinarity?**

# Interdisciplinarity is ...

- A process of **answering a question/ solving a problem/ addressing a topic**
  - which is too broad/complex to be dealt with adequately by a single discipline/profession.
- It asks for the integration of the contributions of several disciplines to a problem/issue.

- Courses present disciplinary perspectives in a serial fashion.



Like Neapolitan ice cream, the flavors (discipline contents) are listed next to each other but don't intersect.

# Cross-disciplinary

- Courses in which one disciplinary perspective dominates the other(s).



Like chocolate chip ice cream, the dominant flavor is vanilla but with flavorful little chunks sprinkled throughout.

# Interdisciplinary

- Courses work toward conscious integration of insights from disciplines.



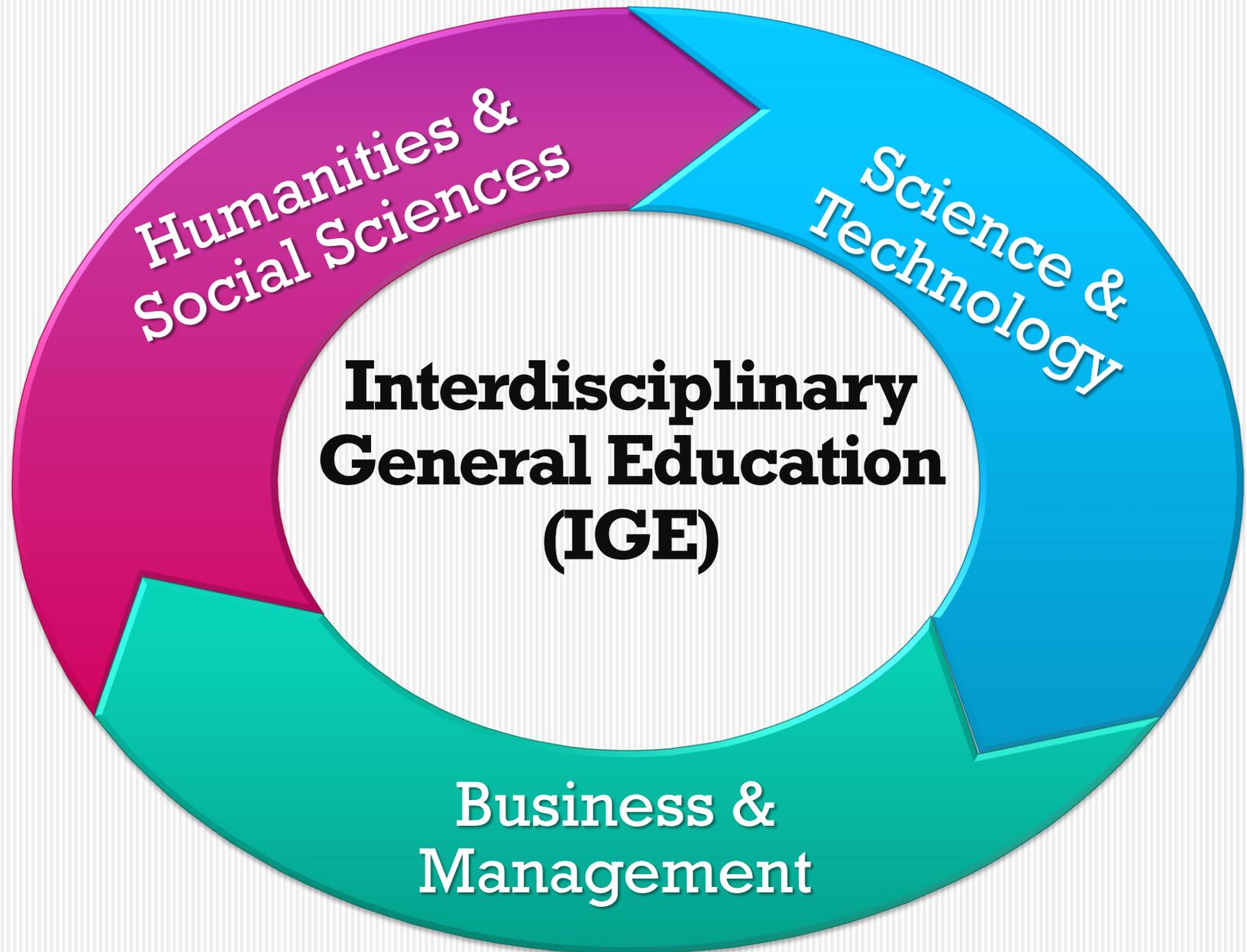
Just like a marble ice cream, both flavors (disciplines) remain distinct and equal, but the result is a distinctly new flavor/experience.

# Intended Learning Outcomes for this workshop

- *Understand the general principles & ideas about designing IGE courses*
- *Able to identify the 8 steps in designing an IGE course*
- *Design a possible course with colleagues during this workshop*

# General Principles & Ideas

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Skills, values, & attitudes  
ahead of content

Knowledge for the  
common good

Help students shift from  
passive to active learning



# 8 STEPS in Designing an ICE course

Step 1 -

Identify **pertinent disciplines** that would contribute to the richness of the course.

8 Steps in Designing an IGE course

# Identify pertinent disciplines

## Examples of IGE courses

### Ways of Knowing: How We Choose What to Believe

- *History / Philosophy / Literature / Drama*

### The Televised Mind

- *Mass Media / Sociology / Freshman Writing*

### Problems Without Solutions?

- *Sociology / Economics / History  
Politics / Religion*

# Identify pertinent disciplines

## Examples of IGE courses

### Looking at the Renaissance: Power and the Person

- *Music / History of Art / Drawing*  
*Freshman Writing*

### The Science of Mind

- *Neurobiology / Cognitive Psychology*  
*Philosophy of Mind and Language*

### Cancer, Genes, and the Environment

- *Biology / Environmental Science*  
*Public Policy*

# Identify pertinent disciplines

## Examples of IGE courses at HKBU

### Creativity 101

- *Physics / Psychology / Visual Arts*

### God, Creation and the Evolving Cosmos

- *Religion and Philosophy / Physics*

### Interactive Computing for Visual Communication

- *Computer Science / Communication Studies / Digital Design*

### Leadership in Sustainability

- *Management / Humanities / Business Ethics / Service Leadership*

Step 2 -

Develop a **topic**;  
consider how to balance  
**breadth** and **depth**.

8 Steps in Designing an IGE course

Step 3 -

Let go of the  
~~“coverage” model.~~

8 Steps in Designing an IGE course

# Step 4 -

Consider what the  
course is **really** about.  
(subtext)

8 Steps in Designing an IGE course

# Step 5 -

## Structure the course; Identify **outcomes**.

*For Example:*

- *Describe, the relationship of humans to the natural world*
- *Analyze globalization and tribalization as powerful world forces*
- *Assess the impact of colonialism and imperialism*

**8 Steps in Designing an IGE course**

# Step 5 (cont'd)

## Structure the course; Identify **outcomes**.

- *Acquire an active and healthy lifestyle.*
- *Use historical and cultural perspectives to gain insight into contemporary issues.*
- *Apply various value systems to decision-making in all aspects of life*
- *Make connections among a variety of disciplines*

8 Steps in Designing an IGE course

Step 6 -

Select **readings**.

**Step 7 -**

**Design assignments.**

**8 Steps in Designing an IGE course**

**Step 8 -**

**Prepare the **syllabus**.**

**8 Steps in Designing an IGE course**

# Example of a Course Syllabus with Reading topics

## Week 1

### Introduction

- Organization of the course; T&L strategies; Project and astronomy lab arrangements; Grading policies; Mutual expectations.

### Lecture 1

- Topics: roots of astrology and astronomy; the Copernican revolution; origin of modern astronomy; the similarities and differences in China and Western astronomies.

**Readings:** “IYA2009” & “Mythology and astronomy”

### Tutorial 1

#### Lab 1

- **Assemble/disassemble telescopes 1 (Assemble/disassemble test; must attend lab 1 (or lab 2), lab 3 and lab 4).**

**Reference reading:** “Foundations of Astronomy” Chapter 1 & 4

### Assignment – Essay 1

- Where do we come from? What is the origin of life on the Earth? Was it created by God? Did it come from the space? Explore the question in both scientific and philosophical perspectives in about 1500 words.
- **Due in week 4 in classroom**

## Week 2

### Lecture 2

- Topics: constellations; atoms and star lights; electromagnetic waves and red/blue shift; telescope and modern technology; information from space.

**Reading:** “Astronomy today”

### Tutorial 2

#### Lab 2

- **Assemble/disassemble telescopes 2 (Assemble/disassemble test)**

### Reference reading:

“Foundations of Astronomy”: Chapter 2, 6 & 7.

## Week 3

### Lecture 3

- Topics: Motion of the Earth; calendar from different cultures; Milankovitch cycles.

**Reading:** “The Earth”

### Tutorial 3

### Lab 3

- How to take picture with a telescope; observation of the Moon and planets

**Reading quiz 1 for L1 & L2**

### Reference reading:

- “Foundations of Astronomy”: Chapter 2 & 5

## Week 4 (Essay 1 due in classroom)

### Lecture 4

- Topics: The Earth system; the Moon; the Apollo missions; solar eclipses, lunar eclipses & their impact on humans

**Reading:** “The Moon”

### Tutorial 4

### Lab 4

- Read star map; use 3D virtual star observation software

### Group discussion 1

- What cause the phases of the Moon? Why do we never see the back of the Moon? Can the position of the Moon affect the life on the Earth?

### Reference reading:

- “Foundations of Astronomy”: Chapter 21.
- “Apollo 11” on Wikipedia

## Week 5

### Lecture 5

- Topics: The Sun - our ultimate source of energy; the solar activities; solar storm & power blackout

**Reading:** “Perfect disaster: solar storm”

### Tutorial 5

### Lab 5

- Solar activity observation

**Reading quiz for L3 & L4**

### Assignment - Essay 2

- The meaning of life: What is the significance of human existence in our universe? What is life all about? What is the meaning of my life? (About 1500 words)
- **Due in week 9 in classroom**

### Reference reading

- “Foundations of Astronomy”: Chapter 8 & 20.
- Article “Power Blackout”

1. *Identify pertinent disciplines*
2. *Develop a topic*
3. *Let go of the “coverage model”*
4. *Develop the subtexts*
5. *Structure the course*
6. *Select readings*
7. *Design assignments*
8. *Prepare the syllabus*

## 8 Steps in Designing an IGE course

# Small Group Activity

# Small Group Activity

Use the ideas we discussed to sketch the design of a GE course in **your discipline**

Take an issue and **work it in an IGE course**

E.g.

- How to handle/use garbage?
- Poverty and Income disparity in Hong Kong

# Think, Pair Share

Pair up with a person next to you and share your design/redesign idea. **Offer suggestions** to improve your partner's idea.

**20 minutes**

Turning back to the group as a whole, be prepared to share your idea or your partner's idea

# Practical Issues

- *Working in team to design the course will make it more effective.*
- *Teaching may not be too time consuming once the students take an active part.*
- *Most of the time, instructors get nice feedback from students.*

# Critical Questions

- *What kinds of **support & guidance** do IGE course designers need from their institutions?*
- *What is your greatest source of **uncertainty** with respect to IGE course design?*



# Call for Course Proposals

- With reference to the implementation plan for the new curriculum, we are now calling for the following GE course proposals for AY2019/20:
  - (1) GE Level 1 – History and Civilization
  - (2) GE Level 1 – Values and the Meaning of Life
- Please refer to the Step-by-Step Guidelines in GEO Website for the application form and details.
- All proposals should be submitted to GEO through the respective offices of the Deans/AVA Director via the Heads of Departments by **29<sup>th</sup> March 2018**.

# Call for Course Proposals (cont'd)

If you are interested in developing and submitting course proposals in other categories, please refer to the timeline below.

Timeline	University Core	General Education
Dec 20 <sup>th</sup> , 2017 – Mar 29 <sup>th</sup> , 2018		Level 1 – History and Civilization Level 1 – Values and the Meaning of Life
Apr 3 <sup>rd</sup> , 2018 – Sep 14 <sup>th</sup> , 2018	Healthy Lifestyle (1 <sup>st</sup> Round)	Level 1 – Quantitative Reasoning
Sep 3 <sup>rd</sup> , 2018 – Oct 31 <sup>st</sup> , 2018		Level 2 – Interdisciplinary Thematic GE Courses (1 <sup>st</sup> Round)
Mid-Jan – late Mar, 2019	Healthy Lifestyle (2 <sup>nd</sup> Round)	
Early Sep – late Oct, 2019		Level 2 – Interdisciplinary Thematic GE Courses (2 <sup>nd</sup> Round) Level 3 – Service Leadership Education Courses (1 <sup>st</sup> Round)
Early Sep – late Oct, 2020		Level 3 – Service Leadership Education Courses (2 <sup>nd</sup> Round)

**Thank You!**

**[ge@hkbu.edu.hk](mailto:ge@hkbu.edu.hk)**