

AMGS Cross Mentoring Research Activity 2016-2017

Syllabus

I. Mentor

1. Personal Information

Name	Dr. Jimmy K.Y. WONG
Mobile Number	852-90967972
School or Institute	Hong Kong NGCA Science Innovation Centre
E-mail	drjwong@newgen.org.hk
Major	Physics (Astronomy, Materials Science)

2. Education

	Year	Name of University	Major	Degree	Nation
Bachelor's degree	85-88	Kings College University of London	Physics	BSc	UK
Master's degree	88-89	Imperial College University of London	Physics	MSc	UK
Doctorate	89-94	Imperial College University of London	Physics	PhD	UK
Dissertation	Silicon-on-insulator (Physics/ Materials Science)				

3. Experiences

Duration	Position	Institute or University
94	Postdoctoral research	Imperial College University of London, UK
95	Postdoctoral research	City University of Hong Kong
1995-2006	Physics teacher	Wong Tai Shan Mem. College, H.K. Diocesan Girls' School, H.K.

2006-present	Centre Director	Hong Kong New Generation Cultural Association Science Innovation Centre
2007-present	HK Fair Director (Team leader)	Intel International Science & Engineering Fair

4. Honors and Awards

Year	Title	Remarks
July 2011	Hong Kong SAR Government Chief Executive's Commendation for Community Service (Innovation Technology)	These awards are presented annually to outstanding citizens in Hong Kong for their services to society (equivalent to the Queen's Honour's Lists in UK)

5. Professional Societies

- Hong Kong Science & Creativity Society (Chairman, 2002 - present)
- Hong Kong Invention Association (Honorary Adviser, 2010-2014)
- Hong Kong STEM Education Association (Chairman, 2016 – present)

II. Syllabus

1. Course Title & Criteria

Course Title	Invention of machines or tools in assisting the daily lives of physically disabled or elderly people
Criteria	<input type="checkbox"/> Biology & Applied Biology
	<input type="checkbox"/> Chemistry
	<input type="checkbox"/> Green Energy & Environmental Science
	<input type="checkbox"/> Integrated Science
	<input type="checkbox"/> Medicinal Science
	<input type="checkbox"/> Nano Science
	<input type="checkbox"/> Physics
<input checked="" type="checkbox"/> Others - Engineering/invention	

2. Course Objectives & Description

With the world and our human race facing many pressing global issues such as climate changes, energy shortages, clean water shortages, spread of new diseases, ageing population, etc. as scientists and innovators, we need to come up with new and innovative methods or inventions that will help us solve some of these problems.

Being a young budding young scientist on this mentoring program, I challenge you to develop and make a simple, effective and practical invention that will help those in need around you and possibly be extend to solve some of the global problems that are facing us all.

3. Required Textbook or papers

“How to think like Leonardo da Vinci” by Michael Gelb (Thorsons, Harper Collins Publisher 1998)

Websites: Google Patents (inventions and patent)

Facebook Page: Interesting Engineering

4. Final Outcome

Mid-term Report	[] Due date:
Final Report	[] Due date:
Research Article for APEC Youth Scientist Journal	[X] Due date: January 27, 2017

5. Schedule

Week	Date	Topics and Activities	Assignments & Other Instructions
Week 1	Oct 21 - 27		
Week 2	Oct 28-Nov3		
Week 3	Nov 4 -10		
Week 4	Nov 11 - 17		
Week 5	Nov 18 - 24		
Week 6	Nov 25 - Dec 1		
Week 7	Dec 2 – 8		
Week 8	Dec 9 – 15		
Week 9	Dec 16 - 22		
Week 10	Dec 23 - 29		
Week 11	Dec 30 – Jan 5	Guide mentees to write Research article for APEC Youth Scientist Journal	
	January 27	Mentee should submit their research article to AMGS admin. team	