

# Si Photonics Integration for Middle school

Time :9:05-9:55 AM 12 March 2017

Teacher :Emmanuel HAVUGIMANA

Students: 35(expected)

Room:66-160

Durations not very accurate<estimates>

1-10 min

History of knowledge about light and warm up

1. Just sun(day/night)
2. Light(from burning) --fire
3. Light bulbs
4. Waveguiding(snell's law)
5. Science of light <EM wave, particle>??
6. Laser

10-20 min

General Manufacturing and technological trends(electronics industry as focus)

1. Sizes that humans were working with<shrinking over time>
2. Cost vs number of units
3. Electronics case

20-30 min

Light technologies at work

1. More to time work <Light!>
2. Extra Eye(Microscopes,and other imaging things)
3. Extra arm (Laser cutting and stuff)

30-45 min

Integrating light technologies into electronics

1. Some of current challenges in electronics

2. One of light proposed solutions (Will it work?)
  - a. Need for High-way
3. Why light is still doing all this for us
  - a. Brainstorm what light can light for you? <Homework!, or class conclusion >
  - b. Wait..... what's is actually light? <whatever>