## HOW TO GRADUATE ON TIME

Ts. Dr. Mai Nursherida Jalaluddin Master of Science (Mechanical Engineering) Ph.D (Mechanical Engineering)

## Outline

- What is a PhD?
- How long does it takes?
- Selecting a PhD topic.
- PhD Myth.
- What is a PhD?
- Conclusion.



#### WHAT IS A PHD?

- The highest degree graduate study.
- Original contribution to knowledge.
- More likely to ask
   why things are done a
   certain way, and how it
   could be made better –
   analytical
   thinking and
   justify.

```
develop write analyse swinburne research study methodolody

literature review PhD university grant scholarship doctoral collegiality thesis development student journal articlegraduation qualitative quantitative publish postgraduate degree examination investigate
```

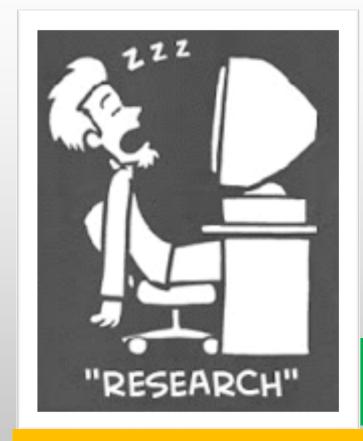
## How long does it takes?

- In IUKL, GOT is 3 years (PhD)
- In other parts of the world... maybe 4 -7 years



# WHYISIT-SO HARD TO GRADUATE ON TIME?





# WHAT IS A

# PhD Project?

# Selecting a PhD topic

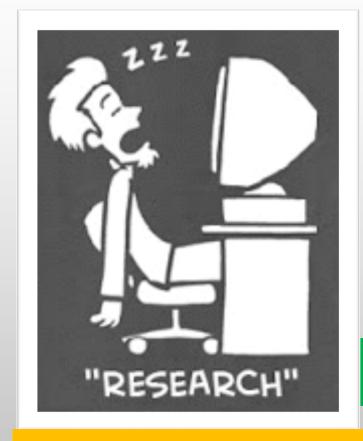
- **✓** Advisor cares about.
- You like.
- Area which is not too mature.
- ✓ Area which is not too immature.
- ✓ Pick an area which is trendy.
  - •Too trendy/common: high competition
  - •Not trendy: less impact and recognition.



# PhD Myths

- You need to be a genius
  - o Diligence **NOT** Intelligence
  - o Managing, selecting and justifying
- Your research will change the world.
  - You need to finish a time-bound project, not win a Nobel prize.
- The PhD is a THE best masterpiece.
  - o PhD is a learning process.

Source: http://www.kevinmorrell.org.uk/phdtips.htm



WHAT ARE THE

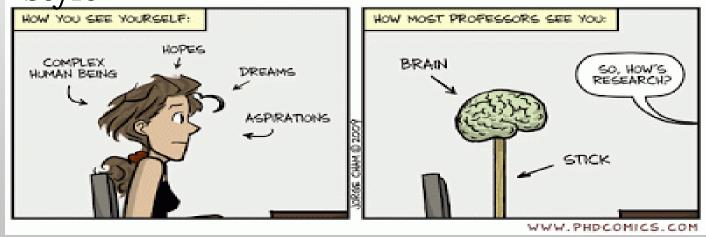
COMMON ISSUES?

### ISSUE #1: MANAGING SUPERVISOR

- ROLE OF SUPERVISOR:
  - APPLY FOR FUNDING,
  - MEET WEEKLY TO TALK ABOUT PROGRESS,
  - REVIEW PAPERS AND WRITEUP,
  - CONSTRUCTIVE CRITICISM
  - RECOMMEND TOPICS,
  - · INTRODUCE STUDENTS TO OTHER PROFESSORS AND RESEARCHERS,
  - PROMOTE THE STUDENT'S WORK, ETC.
- HOW TO SELECT A GOOD SUPERVISORS? WHAT ARE THE CRITERIA?

### ISSUE #1: MANAGING SUPERVISOR

- Advising styles:
  - master/apprentice style vs. passive hands-off style



The style may evolve

### **SOLUTION #1: MANAGING**

- SUPERVISOR
   One of the main reasons to fail a PhD
- Source of conflict: Miscommunication
- Culture
- Be polite and show respect
- Be honest.
- Tell them what you are learning and learnt
- Teach them something new









# Solution #1: Managing supervisor

- What does a supervisor expect???
  - Work independently..
  - Produce quality work..
  - Be honest...



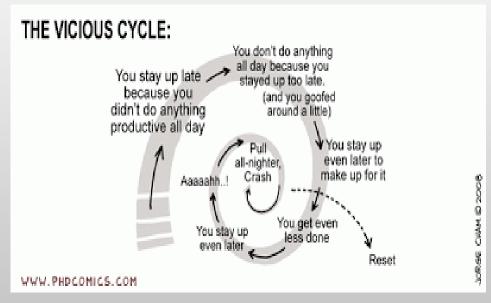
## Issue #2: Time Management

There are so many things

to read.

Yes, so STOP
 PROCASTINATING

• Embrace your research issue!



# Solution #2: Time management

- No one best solution
- Fixed schedule productivity, 8-5pm everyday.
- You can actually achieve higher productivity by working less if you are smart.



# Solution #2: My supervisor's tips and



- Plan, plan, plan: Yearly, monthly, weekly, and daily goals;
- Breaking goals into specific tasks;
- Working on 2/3-hour chunks with 30-minute breaks:
- Working on up to 3 projects at the same time.



### ISSUE #3: I HAVE A LOT TO READ!

- No.... and Yes....
- Reading in an essential part of the research process.



• How to read a research paper?

## SOLUTION #3: I HAVE A LOT TO READ!

LOSE X

- Reading must be selective.
- Select publications from top and journals.
- Identify the top authors.
- Follow the citation graph and read the related papers.
- Summarize each paper you read in a few sentences.
- Read critically.

Donna L. Hoffman & Thomas P. Novak

# Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations

The authors address the role of marketing in hypermedia computer-mediated environments (CMEs). Their approach considers hypermedia CMEs to be large-scale (i.e., national or global) networked environments, of which the World Wide Web on the Internet is the first and current global implementation. They introduce marketers to this revolutionary new medium, propose a structural model of consumer navigation behavior in a CME that incorporates the notion of flow, and examine a series of research issues and marketing implications that follow from the model.

Marketing in hypermedia **computer-mediated** environments: conceptual foundations

DL Hoffman, TP Novak - The Journal of Marketing, 1996 - JSTOR

... We next present a series of 15 research issues in-volving the **flow** construct and process model, while pay ... Model 2: Interpersonal and **computer-mediated** commu-nications. ... The solid and dashed lines indicate **communication flows** through a medi- um for two distinct persons. ...

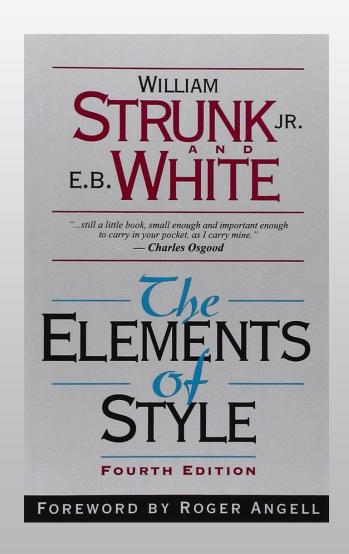
Cited by 4763 Related articles All 11 versions Web of Science: 1081 Cite Saved

#### SOLUTION #3: I HAVE TO READ A LOT!

- Read other than your research stuff.
  - Writing style
  - Referencing style
  - Statistics
  - Grammar

#### Online:

- 1.http://faculty.washington.edu/heagerty/Courses/b572/public/StrunkWhite.pdf
- 2. https://owl.english.purdue.edu/owl/



# ISSUE #4: I HAVE PROBLEM WITH WRITING

- Writing should be a routine activity.
- Not only for supervisor, for your record.



•A very common mistake is to separate research time from writing time.

# SOLUTION #4: I HAVE PROBLEM WITH WRITING

- Writing well is difficult, keep practicing.
- Get feedback.
- Print and read aloud.
- Writing is re-writing.
- Don't try to write a perfect first draft
- **NEVER** underestimate how long it will take to write up.

# Solution #4: I have problem with writing

- Clarity, clarity, clarity.
- Flow, flow coherence and unity.
- Follow basic paragraph rules: Topic sentence, supporting sentence(s) & concluding sentence.
- A paragraph ideally should not be more than eight lines.
- Use active voice.
- Writing is thinking.

# Solution #4: I have problem with writing

- Use all opportunities to learn English
- Get professional help
  - Remember, it isn't your supervisor's job to proof read what you write.
- They only have a limited time available for you try to use that time to most effect.
- Get advice about your PhD, not your English.

#### ISSUE #5: MAKING PROGRESS

- Progress is measure by OUTPUT, not time.
  - Good explanation, publications, writeup.
- There are no rules on how to allocate time for research.
  - If you don't know whether you are making 'enough' progress, ask.
- Do not waste your time & energy on problems
  - Focus on solutions.
- Do not compare your progress with others
  - Every research is unique.

#### ISSUE #5: MAKING PROGRESS

- Weekly meetings can be very helpful
  - It's OK if you have nothing substantial to report, but don't make it a habit.
- Use this **OPPORTUNITY** to discuss issues and potentials.
- Think about the best way to explain things, provides the evidences/references.
- A good exercise to explain about your research.

#### **REFERENCES:**

- Mihir Bellare <a href="http://cseweb.ucsd.edu/~mihir/phd.html">http://cseweb.ucsd.edu/~mihir/phd.html</a>
- Richard Butterworth <u>http://public.randomnotes.org/richard/PhDtalk.html</u>
- Alex Hope
   http://drsustainable.wordpress.com/2012/05/25/experiences-as-a-phd-student/
- Matt Schonlau, How to finish a Ph.D. <a href="http://www.schonlau.net/finishphd.html">http://www.schonlau.net/finishphd.html</a>
- PhD Comics <a href="http://www.phdcomics.com">http://www.phdcomics.com</a>