

THE MENTOR-MENTEE RELATIONSHIP

&

POSSIBLE MENTOR-MENTEE MEETING TOPICS

Dr. Armando Antonio Rodriguez
Professor of Electrical Engineering
School of Electrical, Computer and Energy Engineering
Ira A. Fulton Schools of Engineering
Arizona State University
650 E. Tyler Mall, GWC 352
Tempe, AZ 85287-5706
aar@asu.edu
<http://aar.faculty.asu.edu/>

Updates: 10-26-16

This document is a work in progress! There is much more to say!!

OVERVIEW: THE MENTOR-MENTEE RELATIONSHIP

Mentor was a friend of Odysseus. He was entrusted with the education of Telemachus - Odysseus' son.

I am sure that this solves all your problems!

I don't think so. :o)

The mentor-mentor relationship can be a very personal relationship.

What Questions should Mentees and Mentors Ask?

Here are a few relevant questions for mentees and mentors.

What Should a Good Mentor Do?

A good mentor should try to help their mentee with a variety of issues; e.g. academic, professional, career, technical, personal, emotional, etc.

A good mentor should do all they can to protect their mentee....in the short-term...and especially in the long-term.

What Should a Good Mentee Do?

The mentee should try to take that first step.... :o)

The mentee should do all they can to try to take control of their life and career.

How Many Mentors Should a Mentee Have?

Mentees can certainly have more than one mentor.

Having more than one mentor gives the student options.....more ears to listen.

Ideally, we'd like mentees (students) to have

2 faculty mentors,
2 student mentors,
2 industry mentors,
another student mentor at the next level (e.g. ASU if you are at a CC, grad school if you are at ASU),
etc...

How Long Should a Mentor-Mentee Meeting Last?

We'd like students to meet with their mentors at least 3 times a semester (20-30 minutes per visit say; this depends entirely on mentor and mentee).

Some students and mentors might meet for much longer.

This depends entirely on the mentor and mentee!

The mentor-mentor relationship is a very personal relationship.

NOTE: Some students might say....

“I don’t want or need a mentor!”

Our response....

you may not want one,
but you certainly need one...
everyone does....
to help with critical planning and decision making....

think of a mentor like a “motorcycle helmet”....
like the helmet, the mentor can definitely help you out in a difficult moment

We all need a letter of recommendation at some point (e.g. for a scholarship, graduate school, for a job, promotion, award, etc.).

A mentor can help!

We can go on and on...

You May Want to Check Out the Following

Mentorship

<https://en.wikipedia.org/wiki/Mentorship>

A Guide to Understanding the Role of a Mentor

<https://www.thebalance.com/a-guide-to-understanding-the-role-of-a-mentor-2275318>

Don't Sweat the Small Stuff Books

<https://www.amazon.com/s/?ie=UTF8&keywords=don%27t+sweat+the+small+stuff&tag=geminimobiles->

[20&index=aps&hvadid=22360829&hvqmt=e&hvbmt=e&hvdev=c&ref=pd_sl_81wdx00a3m_e](https://www.amazon.com/s/?ie=UTF8&keywords=don%27t+sweat+the+small+stuff&tag=geminimobiles-20&index=aps&hvadid=22360829&hvqmt=e&hvbmt=e&hvdev=c&ref=pd_sl_81wdx00a3m_e)

Mentoring: Theory and Practice (Medical Profession)

http://www.faculty.londondeanery.ac.uk/e-learning/feedback/files/Mentoring_Theory_and_Practice.pdf

POSSIBLE MENTEE-MENTOR MEETING TOPICS

Here are possible mentee-mentor meeting topics.

1) **Academic Progress**

How is mentee doing in their classes?

2) **Academic Success**

What resources are available to help the mentee with academics?

Available free and private tutoring

Using Donna O. Johnson's
Guaranteed 4.0 Learning System

this \$25 paperback addresses

How to study

How to take notes

How to prioritize

How to do time management

etc

2) **Classes for Next Semester**

What classes should mentee take next semester?

3) **Personal Stuff**

How are things going for mentee outside of ASU?

How are things going for mentee at home?

How are things going for mentee at work?

4) **Technical Interests of Mentee**

What is mentee interested in pursuing technically? e.g.

- robotics, quadrotors, image processing, swarms of robots, artificial intelligence, etc.
- astrobees

<https://ti.arc.nasa.gov/tech/asr/intelligent-robotics/astrobee/>

- advanced transportation systems, spacecraft, hypersonic vehicles, mag-lev, micro-air vehicles, driverless and driver assisted vehicles, etc.
- sustainability, renewable energy; Food, energy and water (FEW) issues

- advanced materials, stealth, etc.
- medical applications, regenerative medicine, personalized medicine,
- additive manufacturing,
- advanced communications,
- security, encryption, etc.
- internet of things (IoTs)
- cloud computing
- improving a manufacturing process
- etc.

see some topics at <http://aar.faculty.asu.edu/batteryPower.html>

visiting professor web pages can help you figure out what they are working on and what you might want to work on

Here are two links for me:

<http://aar.faculty.asu.edu/>
<http://aar.faculty.asu.edu/research.html>

5) Interest Paper

Has the mentee done an (almighty and powerful) career-shaping interest paper to explore their interests

see outline at:

http://aar.faculty.asu.edu/pdf/AAR%20INTEREST%20PAPER%20-%20ENG-METS-ACADEMY%20ASAP%20PROGRAM%20_10_1_2016_.pdf

WE WANT ALL OF OUR SCHOLARS (PROGRAM PARTICIPANTS) TO DO AN ALMIGHTY AND POWERFUL CAREER-SHAPING INTEREST PAPER (5 pages + references)

IF YOUR IN A CLASS, PLEASE FOLLOW YOUR INSTRUCTOR'S SPECIFIC ASSIGNMENT INSTRUCTIONS!!!

WE WANT THE INTEREST TO BE A FUNDAMENTAL PROGRAM REQUIREMENT!!!!

PROGRAM SCHOLARS SHOULD
UPDATE THEIR INTEREST PAPER FROM SEMESTER TO SEMESTER...TO
REFLECT NEW STUFF LEARNED IN AND OUT OF THE CLASSROOM

6) Comprehensive Literature Survey

Has the mentee conducted a comprehensive literature survey?
How should one begin? (go to Library, ask librarian, internet, get a few papers from mentor, etc.)

7) Potential Projects

potential projects that students might work on....professors they might work with

We use the word project here VERY loosely in order to accommodate
the VERY broad interests of students and their mentors

8) Career Opportunities and Career Planning

see:

http://aar.faculty.asu.edu/AAR_COMPREHENSIVE-CAREER-PLAN-10_17_11.pdf

preparing a resume
general preparation for a career fair
career services

relevant seminars
student clubs and organizations
professional organizations(e.g. AIAA, IEEE, ASME, SWE, SHPE, etc.)
honor societies (Tau Beta Pi, Eta Kappa Nu, etc.)

financial aid

applying for a scholarship
applying for graduate school

getting a letter of recommendation

community service (e.g. tutoring, mentoring in METS Center, visiting schools to promote
STEM, hospice, etc.)

9) Other Important Topics

finding a suitable mentor
http://aar.faculty.asu.edu/AAR_Finding_a_Mentor.pdf

importance of education

lifelong learning

graduate school

writing a statement of purpose

http://aar.faculty.asu.edu/AAR_WRITING-A-STATEMENT-OF-PURPOSE-10_14_11.pdf

getting involved in research

http://aar.faculty.asu.edu/AAR_Getting_Involved_In_Research.pdf

applying for FURI

<https://engineering.asu.edu/furi/>

http://aar.faculty.asu.edu/AAR_SAMPLE-FURI-PROPOSAL-TIMELINE-PERSONAL-STATEMENT-10_14_11.pdf

writing a research proposal

http://aar.faculty.asu.edu/AAR_RESEARCH-PROPOSAL-GUIDELINES-10_14_11.pdf

writing a technical paper

http://aar.faculty.asu.edu/AAR_RESEARCH-PROPOSAL-GUIDELINES-10_14_11.pdf

the global economy and how it impacts all of us

the ongoing technological revolution

10) Classes that will Transfer to ASU (if you're currently a Student at a CC)

What are relevant classes given the mentee's interests?

What classes will transfer to ASU?

11) Transferring to ASU ENG (if you're currently a Student at a CC)

What issues should mentee think about before transferring to ASU ENG, relevant deadlines

(applying before Feb 1st to meet most ASU scholarship deadlines),

scholarships available at ASU,

Our METS-ASAP scholarship!!!!

\$4K per year

GPA > 3.0

Demonstrate financial aid via FAFSA

US citizen, national, permanent resident or alien refugee

12) Other Topics for Discussion

See our list of 139 critical questions

http://aar.faculty.asu.edu/critical_questions.pdf

REQUEST: SURVEY

If you think I left something out (and I am certain I did), please let me know at aar@asu.edu

How would you rate the mentor-mentee document?

From what you learned, what stands out the most?

What do you think is missing? Be brutal!

Thank you very much!

Good Luck!!

Dr. Armando Antonio Rodriguez
Professor of Electrical Engineering
School of Electrical, Computer and Energy Engineering
Ira A. Fulton Schools of Engineering
Arizona State University
650 E. Tyler Mall, GWC 352
Tempe, AZ 85287-5706
aar@asu.edu
<http://aar.faculty.asu.edu/>

“Preparing engineers today for tomorrow’s grand challenges...creating tomorrow’s leaders, researchers and innovators.”