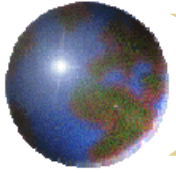


# *Success in Graduate School!*

David Mazyck, Ph.D.

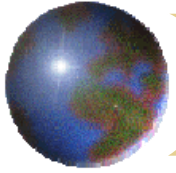
Assistant Professor

Environmental Engineering Sciences



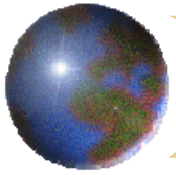
# *Outline*

- Student evaluates prospective faculty
  
- The Faculty's Perspective
  - Perfect Student
  - The Researcher
  
- Graduate School
  - Advisor
  - Expectations
  - Funding and Research
  
- Employer's Perfect Hire



## *Faculty's Perfect Student*

- ⊕ Independent thinkers and workers
- ⊕ Ability to work in a team
- *Excellent* communication & written skills
- Motivated
- Jack/Jane of all trades, Master of at least one!
  - ▣ Laboratory work requires many skills



## *Solution: Researcher has a Problem*

### ● Solution 1

- ▣ Quit

### ● Solution 2

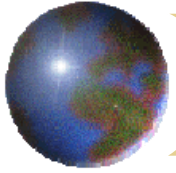
- ▣ Ask faculty mentor

### ● Solution 3

- ▣ Ask colleagues

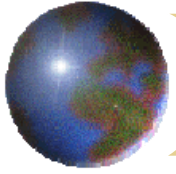
- ▣ Search library, internet, texts, etc.

- ▣ Ask faculty mentor



## *Employer's Perfect Hire*

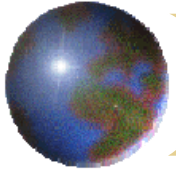
- ➊ Same skills desired by faculty
- ➋ Start now, and succeed later
- ➌ Key to future begins now



# *Graduate School*

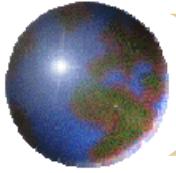
## ➊ What to do?

- ▣ Get good grades ( $> 3.0$  GPA and higher)
- ▣ Read
  - Masters – 1 paper per week
  - Ph.D. - 1 paper per day
- ▣ Break something
- ▣ Make a mistake
- ▣ Stay motivated



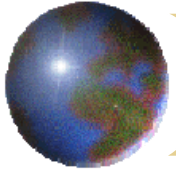
## *How to Excel*

- Treat graduate school like a job
  - 30-40 hours per week (minimum)
  - Start and finish day at the same time
  - Time management
- Commit to excellence!



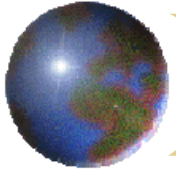
## *Expectations continued*

- Student will commit to:
  - Intensely study the literature
  - Devote majority of time to research
    - At least 30 hours per week
  - Think out of the box!
    - Challenge the literature, texts, and faculty
  - Persevere!
    - Roller coaster ride
    - Like walking your dog



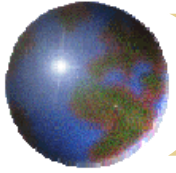
## *Funding: Even if funded*

- Pursue fellowships
  - Prestigious
  - Make more money
  - Demonstrates ability to perform at next level
  - Helps the team



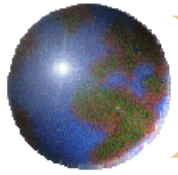
## *Purpose of Research*

- ➊ Make a new contribution to science
- ➋ Starts with a hypothesis
- ➌ Work plan to solve hypothesis
- ➍ Challenging
- ➎ Requires devotion
- ➏ Develop critical thinking skills



## *Advisor*

- Will be your comrade for ever
- Should have an excellent relationship built upon:
  - Trust
  - Intellectual stimulation
  - Respect



*Questions?*