

## Ten Steps to Academic Success in Astronomy\*

\*or any major, really!

**Your semester when you don't have a plan for academic success!**



## Ten Steps for Academic Success

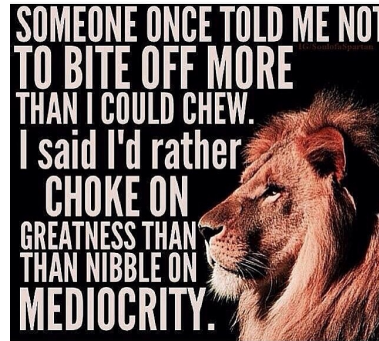
1. Set individual academic and personal goals.
2. Choose courses carefully, especially during your first year.
3. Know and use resources.
4. Meet and get to know faculty.
5. Study actively.

## Ten Steps for Academic Success

6. Manage your time well.
7. Know and actively use reading skills.
8. Develop strong listening and note-taking skills.
9. Develop and improve your writing and speaking skills.
10. Get involved in co-curricular activities; learn skills and gain experience.

## Your GPA: Goals, Plan, Action

- ▶ Write your Goals
  - ▶ Reflect YOUR needs and wants
  - ▶ Large and ambitious, but not too vague
  - ▶ Write it down!
- ▶ Make a Plan
  - ▶ How will you achieve your goals?
- ▶ Take Action!
  - ▶ Bring your goal and plan to life!
  - ▶ Prevent procrastination!



## JFK's GPA

- ▶ Goal: Land on the Moon within a decade (and return)
- ▶ Plan: 3 stages
  - ▶ Mercury program
  - ▶ Gemini program
  - ▶ Apollo program
- ▶ Action:
  - ▶ 20 manned space flights in 1960s
  - ▶ Landed on the Moon: June 1969



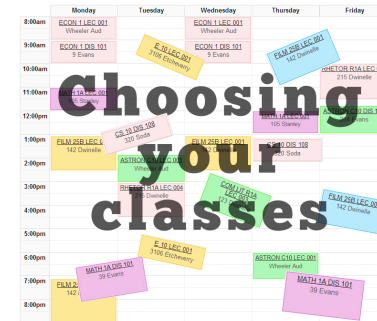
## Choose Classes Carefully

- ▶ Balance and Volume
  - ▶ Not too heavy, not too light
- ▶ Required classes
  - ▶ Make progress in your major
- ▶ Electives
  - ▶ Classes of interest
  - ▶ Beneficial to your career
  - ▶ Explore other majors



## Choose Classes Carefully

- ▶ Mix it up!
  - ▶ Engage both sides of your brain!
  - ▶ Science AND art!
- ▶ Size, Time, Location
  - ▶ Does it work for you?
- ▶ Get more info
  - ▶ Read the syllabus
  - ▶ Sit in on the course
  - ▶ Check out the prof
- ▶ Talk to your advisor!



## Know and Use Resources

- ▶ Tutoring Programs
  - ▶ Chemistry
  - ▶ Math
  - ▶ Physics (list available)
- ▶ Campus Services
  - ▶ Career Center
  - ▶ Counseling Center
  - ▶ DRES
  - ▶ McKinley Health Center
  - ▶ Media & Reserve Services
  - ▶ Residence Hall Libraries
  - ▶ Undergraduate Library



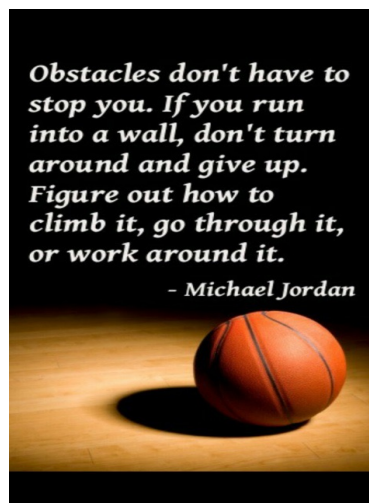
## Office Hours Dos/Don'ts

- ▶ Do GO!
- ▶ Don't remain silent
- ▶ Do arrive prepared
- ▶ Don't go when you're sick
- ▶ Do touch base if you miss class
- ▶ Don't make lame excuses
- ▶ Do be honest
- ▶ Don't send Mom (or a friend)
- ▶ Do explain issues calmly



## Study Skills: Overcoming Obstacles

- ▶ 5 Minute Technique
- ▶ Around the World Technique
- ▶ Switch-Over Technique
- ▶ Positive Reinforcement
- ▶ Knitting Technique



## When You Have to Cram...



- ▶ Accept that you can't study everything at the last minute
- ▶ Find out what the test is on. Focus on that!
- ▶ Read class notes, mark most important ideas

## When You Have to Cram...



- ▶ Use review/study sheets from instructor
- ▶ Create “cram sheets” of important ideas
  - ▶ No more than 3-4 sheets, single side only
- ▶ Broaden understanding of what you know, rather than learn new concepts at the last minute

## i>clicker question

The main objective in choosing a goal should be the

- A. satisfaction in obtaining it.
- B. professional esteem in which it is held.
- C. personal interest in it.
- D. monetary rewards it brings.
- E. how it compares to the goals of peers.

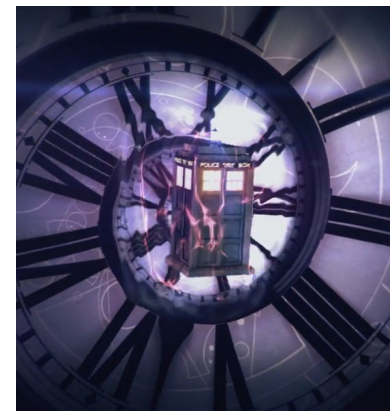
## i>clicker question

It is a good idea to go to my professors' office hours

- A. Yes, it's a great way to enhance your understanding of class material.
- B. Yes, it's a great way to get to know your professors and for them to know you.
- C. No, professors are busy. Don't waste their time.
- D. No, it shows you are weak.
- E. Both A and B

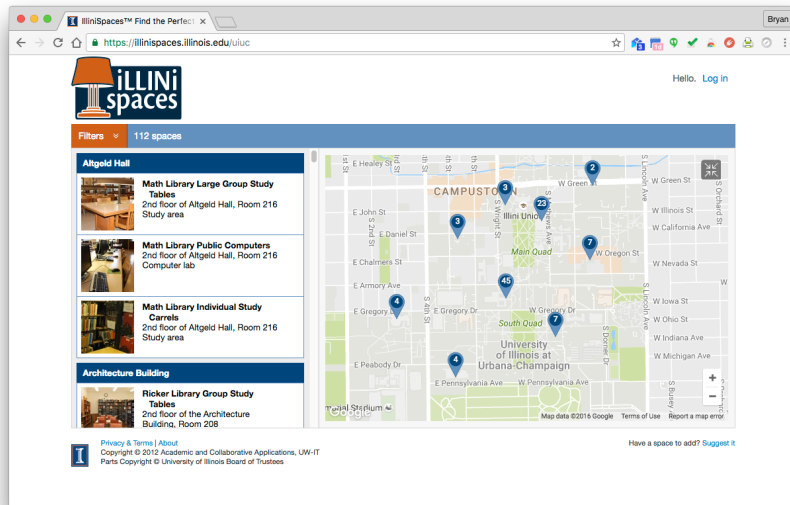
## Time Management Tips

- ▶ Set aside time daily to review class material
- ▶ Find a good study spot
- ▶ Schedule study time when YOU work best
- ▶ Plan enough time for studying!
- ▶ Leave unscheduled time for emergencies
- ▶ Plan time for recreation!





## Illini Spaces



## Stressed?



**Remember to make time to relax!**

## Time Management Tips

- ▶ Schedule is a “game plan” - be flexible!
- ▶ Reduce unproductive habits
- ▶ Break tasks into small pieces to make them manageable
- ▶ Keep a todo list, add deadlines immediately!
- ▶ Don't beat yourself up over slip ups, learn from them!



<http://care.engineering.illinois.edu/time-management/>

## Time Management Problems

- ▶ Unrealistic Expectations
- ▶ Procrastination
- ▶ Rigid Scheduling
- ▶ Lack of Priorities
- ▶ Personal Problems
- ▶ Lack of Goals



[invisiblebread.com](http://invisiblebread.com)

<http://care.engineering.illinois.edu/time-management/>

## Be S.M.A.R.T. with your time!

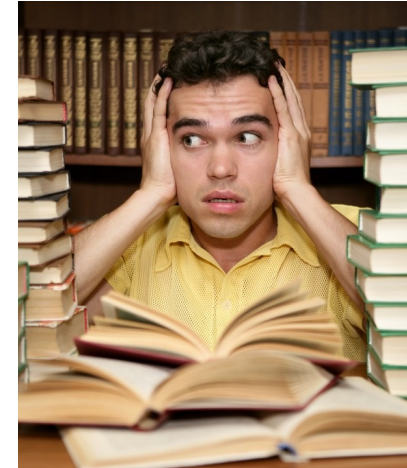
- ▶ **Specific:** What you will actually do.
- ▶ **Measurable:** How you will know you are done.
- ▶ **Action-Oriented:** Have a plan of what to do.
- ▶ **Realistic:** Fit your time and energy to your goal.
- ▶ **Time-Bound:** Specify the amount of time you will spend working.



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## Five Reading Myths

- ▶ Myth 1: Read every word
- ▶ Myth 2: Reading once is enough
- ▶ Myth 3: Don't skip passages
- ▶ Myth 4: Machines improve speed
- ▶ Myth 5: Reading fast = less understanding



<http://www.dartmouth.edu/~acskills/success/reading.html>

## Skimming & Scanning

- ▶ Read the title of the chapter or selection
  - ▶ What is it about?
- ▶ Watch for
  - ▶ Key words: "causes," "results," "effects"
  - ▶ Signal words: "versus," "pros and cons"
- ▶ Look at headings, bold/italics words
- ▶ Don't sweat the details and miss the main idea!



**Skimming and scanning make it easier to grasp large amounts of material**

[http://www.dartmouth.edu/~acskills/docs/6\\_reading\\_myths.doc](http://www.dartmouth.edu/~acskills/docs/6_reading_myths.doc)

## Note-taking Tips

- ▶ Don't try to take every note word for word
- ▶ Leave 2 in. margin for adding questions to be answered
- ▶ Use modified outline: main points w/ supporting details
- ▶ Use abbreviations
- ▶ Review or rewrite notes the same day as class



<http://care.engineering.illinois.edu/study-skills/>

## Writers Workshop



<http://www.cws.illinois.edu/workshop/writers/tips/>

## Get involved!

- ▶ Student groups in astronomy/physics:
  - ▶ UIAS
  - ▶ Women in Astronomy
  - ▶ SPS
  - ▶ Women in Physics
  - ▶ Physics Van
  - ▶ Illinois Space Society
- ▶ Undergrad research
  - ▶ Experience, skills, networking!



## Homework

- ▶ Think about your goal. Write it down.
- ▶ PS - It's okay if you change it later!