DEPARTMENT OF MATHEMATICS
FRESHMAN “KICK-OFF”

August 2012
**Brain Teasers (try them out!)**

**Problem: A Stick variation**
How many ends do five stick have?
What about five and a half stick?

**Problem: Chess**
Two friends played chess for four hours. How many hours each of them played chess for?

**Problem: A Log**
It takes 12 minutes to saw a log into 3 parts. How much time will it take to saw it into 4 parts?

**Problem: A Caterpillar**
A caterpillar wants to see the world and decides to climb a 12-meter pole. It starts every morning and climbs 4 meters in half a day. Then it falls asleep for the second half of the day, during which time it slips 3 meters down. How much time will it take the caterpillar to reach the top?

**Problem: Fingers**
Humans have 10 fingers on their hands. How many fingers are there on 10 hands?

**Problem: Horses (submitted by Yulia Yelkhimova)**
Three horses are galloping at 27 miles per hour. What is the speed of one horse?

**Problem: Museums**
Ten kids from Belmont High School went on a tour of Italy. During the tour they visited 20 museums. How many museums did each kid go to?

**Problem: Twins**
How many people are there in two pairs of twins, twice?

**Problem: Eggs (submitted by Jonathan)**
It takes 3 minutes to boil 3 eggs. How long will it take to boil 5 eggs?

**Problem: A Rabbit (submitted by Gabe)**
On average, rabbits start breeding when they are 3 months old and produce 4 offspring every month. If I put a day old rabbit in a cage for a year, how many offspring will it produce?

**Problem: Eggs (submitted by Xi_Heather)**
A chicken and a half can lay an egg and a half in a day and a half. How long will it take three chickens to lay three eggs?

**Problem: Cucumbers (submitted by Misha)**
100 pounds of cucumbers, that were 99% water, got a bit dehydrated, and became 98% water. What is their weight now?

**Problem: Friends**
Two friends went for a walk and found $20. How much money would they have found if they were joined by two more friends?

**Problem: Goldfish (submitted Rua Javari)**
One hundred percent of the fish in a pond are goldfish. I take 10% of the goldfish out of the pond. What percentage of goldfish does the pond now contain?
PART I:
FRESHMEN ADVISING
THE ADVISING TEAM

Program Administration

Paulo Lima-Filho
• Director of Undergraduate Programs

Donna Hoffman
• Undergraduate Program Assistant

Freshmen Advisers

Ben Aurispa

Heather Ramsey

David Manuel

Mila Mogilevsky

Senior Advisers

Mike Stecher
• Head Senior Adviser

Sue Geller
• Director of Honors Program

Tom Vogel
• Upperclassmen Adviser
The Importance of Being Advised

Advisers are your COACHES.

They Know the winning strategies.

They have the experience.

They have the knowledge and the will.
The Importance of Being Advised

We are a winning TEAM.

You are our best players.

Our goal is your success.
**The Freshmen Advising Process**

**New Student Conferences**
- WHEN: Before Classes Start
- Initial Orientation
- Scheduling and Registration

**Freshmen “Kick-off”**
- WHEN: First Week of Classes
- Advising Process
- Get-to-know each other
- What you need to know RIGHT NOW!

**Mid-term Coaching Sessions**
- WHEN: Mid-semester
- Self-evaluation and advising
- Redesigning strategies
- Smaller groups and individual session

**End-of-term Coaching Session**
- WHEN: End-of-semester
- Self-assessment
- Scheduling and Registration
## Important Resources

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PART II:

WHAT you NEED to KNOW

RIGHT NOW!
The “Boot-Camp” Period

Basic Coursework = Brain “pumping-iron”

The more you work-out, the stronger you get.

Once you build knowledge “mass” and skills, you are ready for the higher level training.
1. For each class you take:
   a. Make sure you know all of the sources of help available to you;
   b. Many courses offer Supplemental Instruction (SI) sessions;
   c. The Math Department offers for many classes: Week-in-Review sessions and Help Sessions

2. Don’t be afraid to ask your professor for help.
   a. Make sure you do so EARLY in the semester.
   b. Even if you are one of 300 students in a class, you can develop a meaningful working relationship with your professor by taking advantage of your professor’s office hours.

3. Read the syllabus for each of your classes carefully.
   a. Some professors make only one announcement about exam dates and homework or paper deadlines.
   b. You are responsible for remembering and abiding by them.

4. Have realistic expectations for the time required to be successful in college.
   a. On average, expect to spend 2-3 hours per week studying and completing work for every hour that you are in class.
   b. This means someone who is registered for 15 hours may need to spend 30-45 hours per week studying and doing homework for classes.

5. Get to know and be known by all your professors.
   a. You need letters of recommendation for scholarships, job applications, and graduate or professional school applications,
   b. You will have several professors who are able to write good letters for you.
1. When you have an advising or a general question and don’t know whom to ask, contact Donna (donna@math.tamu.edu).

2. Not happy with your schedule?
   - You can add and drop classes to change your schedule, upon approval of advisor;
   - You can switch to a different section of the same class during the first week of classes.

3. Get a head start on the job hunt!
   - Attend the College of Science Career Fair on Thursday, Sept. 13, 2012, from 10am-3pm in the MSC Bethancourt Ballroom.

4. Registration for the Spring 2013 semester starts mid-November.
   - Make an appointment – through Donna Hoffman - with an academic advisor as soon as October 1st to discuss your spring schedule (watch for reminders from Donna) or risk being blocked from registration!

5. All Texas A&M University students are required to satisfy the University Core Curriculum requirements.
   - The Math Department has specific provisions on some of the courses you must take to fulfill the core curriculum:
### Core Curriculum

#### Communications
- Take ENGL 104 AND one of the following: ENGL 210, 241, or 301

#### Humanities
- Take an English Literature class.

#### Social Science
- APMS majors: take ECON 202 or 203.
- Teaching Certification Majors: take INST 310
- All other majors: Choose from any social science listed in the course catalog.

#### Visual and Performing Arts
- Choose from any visual and performing arts class listed in the course catalog, but see the note below about ICD.

#### International/Cultural Diversity (ICD)
- **Teaching Certification Majors:** INST 310 and SOCI 317/INST 322 are required for certification, and these classes will satisfy the ICD requirement.
- **All other majors:** ICD courses are the only ones that can do “double duty” in the University Core Curriculum. By selecting ICD courses carefully, you can increase the number of free elective hours in your degree plan.
  - Many English literature classes (your humanities requirement) also count as ICD credit.
  - Some ICD courses also count as a Social Science course or a Visual and Performing Arts course.

#### Writing Intensive Courses:
- Take Math 220, and one other writing intensive course such as Math 467, Math 396 (see an advisor for help).

#### Kinesiology:
- Take one KINE 199 (S/U only) and one KINE 198 (graded or S/U)
**Degree Options**

**Bachelor of Arts in Mathematics**
- Certification
- Non-Certification

**Bachelor of Science in Mathematics**
- Pure Math
  - APMS/MATH
  - APMS/STAT
  - APMS/ACTUARY
  - APMS/ECON
  - APMS/CPSC
  - APMS/BIOL

**aggieTEACH Program**
Become a High School Math or Science Teacher

Earn your bachelor’s degree and your teaching certification during your undergraduate years!

JOIN
aggieTEACH

Jennifer Whitfield
Program Director
514 Blocker
979.458.2087
jwhitfld@tamu.edu
aggieteach.tamu.edu

LEARN  TEACH  IMPACT
PART III:

IMPORTANT TIPS!
IMPORTANT TIP: GET INVOLVED

Do you want to:

• Learn about career opportunities in math?
• Build a study peer group?
• Participate in outreach programs?
• Know what Math is really all about?

Then the Dept. of Math offers lots of great activities, clubs and seminars:
(You can find the links in our web pages)

• Aggie Actuaries club
• Applied Math Undergraduate Seminar (AMUSE),
• Future Aggie Math Educators (FAME)
• Math Club/Pi Mu Epsilon

Watch for emails from Donna about when and where meetings will occur
IMPORTANT TIP: PARTICIPATE

- We sponsor many Math Majors events throughout the year.
- Participation is very important and fun!

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**IMPORTANT TIP: PARTICIPATE**

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OTHER EXCITING OPPORTUNITIES

Study-abroad programs involving 50 countries
Overseas study centers

- Santa Chiara Study Center (Italy)
- TAMU Facility in Mexico (San Miguel de Allende)
- The Soltis Center for Research and Education (Costa Rica)
INTERNATIONAL PRESENCE

Significant global presence in Latin America, the European Union, Pacific Asia and the Middle East

Visit our International Gateway

http://international.tamu.edu/gateway/