Welcome to AGEC 350

A. Have you completed the survey?
   If not go to
   
   https://tinyurl.com/AGEC350Survey

   It only takes a couple of minutes.

Introductions

Rich Woodward
🎉 210M AGLS
🎉 979-845-5864
🎉 r-woodward@tamu.edu
🎉 Office Hours
   Open door policy
   Appointments suggested

Macson Ogieriakhi
🎉 383 AGLS
🎉 xpmacs@tamu.edu
🎉 Office Hours:
   Thursday 7:00 – 8:00 p.m.
   Zoom ID: 943 7446 1121
   Passcode: 770400

COVID

🎉 https://covid19risk.biosci.gatech.edu
🎉 Official guidance to all faculty:
   “Under no circumstances can persons be
   asked about their vaccination status or
   required to wear a mask.”

🎉 Recommendations:
   🎉 If you’re not vaccinated, get your first dose
today!
   🎉 Masks are not that big of a deal. They reduce
   risks and are recommended.

The steps to learning

1. Acquiring basic facts & concepts
2. “Processing” concepts by working with
   them
3. Applying concepts to new problems
4. Asking questions clarifying

The steps to learning

A. Asking questions & obtaining clarification
B. “Processing” concepts by working with them
C. Acquiring basic facts & concepts
D. Applying concepts to new problems

For each of these rank it from 1 – 5

1. Can easily be done alone
5. Much better in a group environment

Working with 1 or 2 people around you

The steps to learning

A. Asking questions & obtaining clarification
B. "Processing" concepts by working with them
C. Acquiring basic facts & concepts
D. Applying concepts to new problems

Now, order the steps from lowest score to highest:

1. Can easily be done alone
2. Can be done
3. Team-based learning
4. Much better in a group environment

Two reasons TBL works

1. Bloom’s taxonomy
2. Neuroplasticity

Outside of class
Tested on RAs

In class teamwork
Tested on exams

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Team-Based Learning

* [https://facultyinnovate.utexas.edu/file/278](https://facultyinnovate.utexas.edu/file/278)
* Backup: [https://vimeo.com/51713733](https://vimeo.com/51713733) or [https://www.youtube.com/watch?v=kxg5FTGZhZs](https://www.youtube.com/watch?v=kxg5FTGZhZs)
Two reasons TBL works

1. Bloom’s taxonomy
2. Neuroplasticity
   - the brain changes throughout life
   - changes in neural pathways and synapses which are due to changes in behavior, environment and neural processes...

Bottom line: Learning is most effective when you work with the concepts.
TBL exercises the brain.

Historical Averages for Woodward’s classes

<table>
<thead>
<tr>
<th>Component</th>
<th>Average Spring 2016</th>
<th>Average Spring 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>iRATs</td>
<td>63.0%</td>
<td>59.70%</td>
</tr>
<tr>
<td>tRATs</td>
<td>92.4%</td>
<td>90.30%</td>
</tr>
<tr>
<td>RAT bonuses (percentage points)</td>
<td>2.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Peer Evaluations</td>
<td>89.4%</td>
<td>86.00%</td>
</tr>
<tr>
<td>Teamwork and homeworks</td>
<td>91.5%</td>
<td>82.00%</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>80.0%</td>
<td>82.00%</td>
</tr>
<tr>
<td>Final exam</td>
<td>80.6%</td>
<td>91.70%</td>
</tr>
<tr>
<td>Final grade</td>
<td>84.7%</td>
<td>82.40%</td>
</tr>
</tbody>
</table>

Grade Components

<table>
<thead>
<tr>
<th>Evaluation Component</th>
<th>Number</th>
<th>% of grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Readiness Assessment Tests (iRATs)</td>
<td>10-11</td>
<td>15</td>
</tr>
<tr>
<td>Team Readiness Assessment Tests (tRATs)</td>
<td>10-11</td>
<td>15</td>
</tr>
<tr>
<td>tRAT bonus points</td>
<td></td>
<td>10-11</td>
</tr>
<tr>
<td>Highest Score on a tRAT: ¼ percentage point final grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Highest Score on a tRAT: ½ percentage point final grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer evaluation of team members</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Individual homework and in-class team work</td>
<td>many</td>
<td>20</td>
</tr>
<tr>
<td>Midterm examination</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Final examination</td>
<td>1</td>
<td>30</td>
</tr>
</tbody>
</table>

Culture of the classroom

My promises to you
- Be prepared
- Be fair and consistent
- Be accessible
- Be understanding
- Be open
- Be clear on priorities
- Give ample time
- Remind you of due dates
- Respect your opinions

Culture of the classroom

What I ask in return
- Be a good teammate
- Participate
- Arrive on time
- Turn off phones & devices
- No distracting activities: Texting, browsing, reading the paper, etc.
- Inform me if leaving early
- Communicate professionally
- Be respectful
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If you witness an instance of discrimination, racism, sexism, etc., either by an instructor or a student, please notify me by email. While ensuring complete anonymity, I will attempt to address the issue.

**Some choice comments**

(positive)
- "I like the teamwork aspect of learning and working as a group. I also enjoyed the team quizzes directly after the iRATs."
- "I liked the videos. It is nice to be able to re-watch and pause during the more dense lessons."

(negative)
- "Having to teach yourself before a quiz is a load of horse crn. I am paying a bunch of money for you to teach me, not for me to teach myself."
- "This class was very unorganized and I dreaded coming every day."
- "The prof. words questions very difficultly and makes things more confusing than they should be."

**Some other comments**
- "The professor should be careful of bias when teaching students. I felt encouraged to agree with the professor on opinion based questions rather than state my true opinion."
- "Please stop shouting so much and loudly clapping on things or clapping super loud. It's very startling."
- "There should be multiple choice tests instead of paragraph."
- "Does the prof have any other shoes than that pair of sandals?"

**Do students like TBL?**

Some do
- "The group teaching method is excellent. This was by far my favorite class setup this semester and one of the best of my college career."

And some don’t
- "Team-based learning is a JOKE!! I do not believe that team based learning contributes whatsoever to this class."

**An idea map for AGEC 350**

(watch the video in Canvas)
Schedule

❖ 5 Modules (2 RATs per Module, usually on Tuesday)
❖ 1&2 Theory of Environmental Economics
❖ 3-5 Problems in Environmental Economics
❖ Practice RAT and group formation on Thursday, 9/2 (counted as Homework grade)
❖ Watch video on benefits & costs in Canvas
❖ First real RAT – Tuesday 9/7
❖ Reading guide with key concepts available on Canvas

Text Book and Assignments

❖ Other required readings and videos will be made available via Canvas

Exams

❖ Midterm Exam (20% of grade)
❖ Tuesday, October 12
❖ Subject to change with prior notification

❖ Final Exam (required, 30% of grade)
❖ Friday, Dec. 10, 3:00 – 5:00 p.m.
❖ Students needing to reschedule must submit a request in writing on or before Tuesday, Nov. 30)

Now: Environmental Economics

Three Gorges Dam, Yangtze River, China
Completed in 2006.
Fully operable in 2008
Cost: $26 billion
Based on the information provided, would you support construction of the Three Gorges Dam?
Based on the information provided, would you support construction of the Three Gorges Dam?

The End

Don’t forget

• Practice RAT on Thursday
• Real RAT next Tuesday