ARE 231: SUPPLY AND DEMAND FOR AGRICULTURAL PRODUCTS

1ST HALF OF FALL 2020

The class is split in two halves. I will cover supply in the first five weeks and Tim will cover demand in the second five weeks.

Instructor: 9/30-11/2 Aaron Smith (adsmith@ucdavis.edu)
Office Hours: Friday 11:00-12:00 or by appt.

Class Website: https://canvas.ucdavis.edu/courses/472779. Visit this site regularly for handouts as well as some occasional announcements.

Course Outline: The class emphasizes empirical work, but we will do some applied theory. We will start big and end small; the first topic will be global agricultural supply and the last will be farm-level supply.

Lectures: MW 12:10-2:00 on zoom. https://ucdavis.zoom.us/j/92489607876

Computing: You may use any software for the empirical work in the class. I will give you Stata and hopefully R code for you to use if you wish.

Reading: We will work through a set of academic papers. The main ones are listed later in this syllabus. The reading list may expand as we proceed. There is no textbook. You must also read and adhere to “Writing Tips for Ph.D. Students” by John Cochrane, which I have posted on the class website.

Code of Conduct: You are expected to uphold the UC Davis code of conduct, which is available at http://sja.ucdavis.edu/files/cac.pdf.

Assessment:
Reading Reactions (10%) Due: midnight before class
Beginning Lecture 2, I will designate a paper or chapter that you are to read closely. I will assign a Canvas quiz for you to ask or answer questions about the paper.

Blog-style article (40%) First Draft Due: 10/16 @ 5pm; Final Draft Due: 10/30 @ 5pm
I post weekly articles on my website that are loosely related to agricultural data. The articlev are 600-1000 words with 3-4 figures. Your assignment is to write one of these articles. Rules: (i) the topic must be something to do with agricultural supply (ii) you may work with a co-author (iii) you must provide code to generate any graphs that you create (iv) you may include graphs created by others (e.g., from papers, data portals such as FAOSTAT or my data apps.) I will choose some of the articles to post on my website (if you agree).
Blog review (10%)  Due: 10/23 @ 5pm  
Review two blog articles by your classmates and offer comments.

Paper (40%)  Due: 11/6 @ 5pm  
You will write a five-page paper. I will give you some specific assignments to choose from. You will do some empirical analysis and write up your work as though you aim to publish it in an academic journal. You may write your papers with a co-author, but I expect them to be joint work. I may ask you to revise and re-submit your paper if there are significant improvements you could make.

Aaron Smith  
September 2020


**Course Outline:**

The reading list may expand as we proceed.

1. **Global Supply**
   


2. **Futures and Commodity Markets**


3. **Country or Market Supply**


4. **Climate Change**


5. **Farm Supply**

*Risk and Insurance*


*Rotation*


**Satellite Data**


<table>
<thead>
<tr>
<th>MON</th>
<th>TUE</th>
<th>WED</th>
<th>THUR</th>
<th>FRI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>SEP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCT</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Lecture 2</td>
<td>Lecture 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Storage and commodity markets</td>
<td>Estimating global ag supply (and demand) elasticities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCT</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Lecture 4</td>
<td>Lecture 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>US crop supply</td>
<td>Climate Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCT</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Lecture 6</td>
<td>Lecture 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Climate Change</td>
<td>Risk and insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCT</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Lecture 8</td>
<td>Lecture 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rotation</td>
<td>Field-level supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCT</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lecture 10</td>
<td></td>
<td></td>
<td>Paper due</td>
</tr>
<tr>
<td></td>
<td>Field-level supply</td>
<td></td>
<td></td>
<td>WEEK 5</td>
</tr>
</tbody>
</table>