







# Interdisciplinary Modeling: Water-Related Issues and Changing Climate RGSC 618 (Summer 2012)

## Class Schedule (as of 6/6/12)

|  | 01d33 3011cddic (d3 01 07 07 12)                    |                      |  |
|--|---|----------------------|--|
| Monday, June 4, 2012 (Location: GT #338; Lunch in GT #300) |   |                      |  |
| 8:00-8:15  | General introduction                                | Saito                |  |
| 8:15-9:15  | Ethics of modeling and why model                    | Saito                |  |
| 9:15-9:55  | Model concepts and issues                           | Koracin              |  |
| 9:55-10:05   | BREAK   |                      |  |
| 10:05-12:00  | Conceptual modeling exercise                        | Saito/Koracin/Steele |  |
| 12:00-1:00   | LUNCH   |                      |  |
| 1:00-2:55  | Weather and climate modeling                        | Koracin              |  |
| 2:55-3:05  | BREAK   |                      |  |
| 3:05-5:00  | GIS, remote sensing and snow hydrology modeling     | Steele               |  |
|  | ne 5, 2012 (Location: GT #338; Lunch in GT #300)    |                      |  |
| 8:00-9:55  | Systems dynamics modeling                           | Ahmad                |  |
| 9:55-10:05   | BREAK   |                      |  |
| 10:05-12:00  | Introduction to Stella lab                          | Ahmad                |  |
| 12:00-1:00   | LUNCH   |                      |  |
| 1:00-2:55  | Vadose zone modeling                                | Heinse               |  |
| 2:55-3:05  | BREAK   |                      |  |
| 3:05-5:00  | Groundwater modeling                                | King                 |  |
| Wednesday,   | June 6, 2012 (Location: GT #338; Lunch in GT #300)  |                      |  |
| 8:00-9:55  | Adding people to the equation                       | Wulfhorst            |  |
| 9:55-10:05   | BREAK   |                      |  |
| 10:05-12:00  | Mathematical modeling                               | Telyakovskiy         |  |
| 12:00-1:00   | LUNCH   |                      |  |
| 1:00-2:55  | Hydrologic/watershed modeling                       | Stone                |  |
| 2:55-3:05  | BREAK   |                      |  |
| 3:05-5:00  | Vegetation-atmosphere, canopy interception modeling | Link                 |  |
| Thursday, Ju   | ine 7, 2012 (Location: GT #338; Lunch in GT #253)   |                      |  |
| 8:00-9:55  | Economics modeling                                  | Elbakidze            |  |
| 9:55-10:05   | BREAK   |                      |  |
| 10:05-12:00  | Ecological modeling                                 | Boykin               |  |
| 12:00-1:00   | LUNCH   |                      |  |
| 1:00-2:55  | Thermal stratification modeling                     | Kreamer              |  |
| 2:55-3:05  | BREAK   |                      |  |
| 3:05-5:00  | Evapotranspiration modeling                         | Sridhar              |  |
|  |   |                      |  |

| Friday I   |  |                    |  |  |  |
|--|--|--------------------|--|--|--|
| Friday, June 8, 2012 (conference/workshop) (Location: KN #238; Lunch in KN #201) |  |                    |  |  |  |
| 8:00-8:15  | Welcome/Introduction                                 | Saito/Link/Fernald |  |  |  |
| 8:15-9:00  | Why the past matters Use and misuse of models        | Biondi             |  |  |  |
| 9:00-9:45  |  | Wilson             |  |  |  |
| 9:45-10:00   | BREAK Issues of scale                                | Coito/Moilo        |  |  |  |
| 10:00-10:45  |  | Saito/Mejia        |  |  |  |
| 10:45-11:30<br>11:30-1:00  | Uncertainty and calibration LUNCH                    | Saito/Tracy        |  |  |  |
| 1:00-1:45  | Overview of acequia project                          | Fernald/Guldan     |  |  |  |
| 1:45-2:30  | Case study (Rio Chama watershed)                     | Rivera/Gonzales    |  |  |  |
| 2:30-2:45  | BREAK  | Rivera/ Gorizates  |  |  |  |
| 2:45-3:30  | Case study (acequia project)                         | Ortiz              |  |  |  |
| 3:30-4:15  | Historical perspective (acequia project)             | Garcia-Bryce       |  |  |  |
| 4:15-5:00  | Case study (acequia project)                         | Boykin             |  |  |  |
| 1.10 0.00  | Assign Projects                                      | Doykiii            |  |  |  |
| Cala   |  | #000 Las 1 07 #000 |  |  |  |
| _  | ne 9, 2012 (conference/workshop) (Location: GT #337/ |                    |  |  |  |
| 8:15-9:00  | Discussion of JCWRE special issue (INSTRUCTORS ONLY) | INSTRUCTORS        |  |  |  |
| 9:00-9:45  | CSDMS modeling                                       | Peckham            |  |  |  |
| 9:45-10:00   | BREAK  | Troov              |  |  |  |
| 10:00-10:45  | Case study   | Tracy<br>Borden    |  |  |  |
| 10:45-11:30<br>11:30-1:00  | Case study<br>LUNCH                                  | Borden             |  |  |  |
| 1:00-2:30  | Work with students on projects                       | all                |  |  |  |
| 2:30-2:45  | BREAK  | all                |  |  |  |
| 2:45-5:00  | Work with students on projects                       | all                |  |  |  |
| 2.43-3.00  | work with students on projects                       | ali                |  |  |  |
| Sunday, June   | e 10, 2012 (Location: GT #338; Lunch in GT #300)     |                    |  |  |  |
| 8:00-9:55  | Lab: Climate modeling                                | Mejia              |  |  |  |
| 9:55-10:05   | BREAK  |                    |  |  |  |
| 10:05-12:00  | Lab: Hydrologic/watershed modeling                   | Saito              |  |  |  |
| 12:00-1:00   | LUNCH  |                    |  |  |  |
| 1:00-2:55  | Lab: Vadose zone/groundwater modeling                | Link/King          |  |  |  |
| 2:55-3:05  | BREAK  |                    |  |  |  |
| 3:05-5:00  | Lab: Canopy interception/evapotranspiration modeling | Link/Sridhar       |  |  |  |
| Monday, Jun  | e 11, 2012 (Location: GT #338; Lunch in GT #300)     |                    |  |  |  |
| 8:00-9:55  | Lab: Economics modeling                              | Cobourn            |  |  |  |
| 9:55-10:05   | BREAK  |                    |  |  |  |
| 10:05-12:00  | Lab: GIS/remote sensing                              | Steele             |  |  |  |
| 12:00-1:00   | LUNCH  |                    |  |  |  |
| 1:00-2:55  | Lab: Systems dynamics modeling                       | Tidwell            |  |  |  |
| 2:55-3:05  | BREAK  |                    |  |  |  |
| 3:05-5:00  | Statistical modeling                                 | Panorska           |  |  |  |
| Tuesday, June 12, 2012 (Location: GT #338; Lunch in GT #300)                     |  |                    |  |  |  |
| 8:00-9:55  | Lab: Ecological modeling                             | Boykin             |  |  |  |
| 9:55-10:05   | BREAK  | -                  |  |  |  |
| 10:05-12:00  | Students work on projects                            |                    |  |  |  |
| 12:00-1:00   | LUNCH  |                    |  |  |  |
| 1:00-5:00  | Students work on projects                            |                    |  |  |  |

## Wednesday, June 13, 2012 (Location: GT #338; Lunch in GT #300)

8:00-12:00 Students work on projects

12:00-1:00 LUNCH

1:00-5:00 Students work on projects

## Thursday, June 14, 2012 (Location: GT #338; Lunch in GT #300)

8:00-12:00 Students work on projects

12:00-1:00 LUNCH

1:00-5:00 Students work on projects

## Friday, June 15, 2012 (Location: GT #338)

8:00-12:00 Students work on projects

12:00-1:00 LUNCH

1:00-5:00 Student presentations of projects

## Friday, June 22, 2012

5:00 p.m. Student reports are due to Laurel Saito by email