<!–sec data-title=”Week 1” data-id=”section1” data-show=false ces–>

Monday, week 1 Gas Exchange 8:30 AM – 9:00 AM Dave Moore: Welcome and Introduction to the Course
 9:00 AM – 9:30 AM Flux Observations: History & Context (Kim Novick)
 9:30 AM – 10:30 AM Team Licor: Introduction to leaf level flux measurements (Aaron Saathoff & Tom Avenson)
 10:30 AM – 10:45 AM Break
 10:45 AM – 12:15 PM Team Licor: Leaf-level flux measurements continued (Aaron Saathoff & Tom Avenson)
 **12:30 PM – 1:30 PM ** Lunch
 **1:30 PM – 4:30 PM ** Hands-on Work with Infra-red gas analyzer (Measurements of A:Ci curves and A:PPFD curves on aspen leaves, Aaron Saathoff, Tom Avenson & Dave Moore)
 **4:30 PM – 5:00 PM ** Debrief gas exchange measurements (Aaron Saathoff, Kim Novick)
 **5:00 – 6:00 PM ** Free Time
 **6:00 PM ** Dinner **7:00 PM ** Crash test talks - Introductions to each other (3 slides / 3 minutes) [//]: # (Hidden from students:FileTheory of Gas Exchange Measurements - Pat Morgan 2015 File) [//]: # (Pat Morgan - Theory of Leaf-Level Gas Exchange Measurements File) ### Tuesday, week 1 - Photosynthesis to the control volume 9:00 AM – 10:15 AM Belinda Medlyn: Chloroplast- and Leaf-Level Flux Modeling (Lecture) Link to Further reading from Belinda 10:15 AM – 10:30 AM Break Some explanations from Andrew Leakey (2015) and Carl Bernacchi (2013) Carl Bernacchi's version of the Farquhar Model 10:30 AM – 12:30 PM Belinda Medyln: Modeling the Biochemistry of Photosynthesis (Hands-on computer) Link the the R package plantecophys Other packages we've used - Pecan.photosynthesis 12:30 PM – 1:30 PM Lunch 1:30 PM – 3:00 PM Russ Monson: Theory and Measurement of Canopy Fluxes Russ 3:00 PM – 3:15 PM Break 3:15 PM – 4:45 PM Ed Swiatek: Calculation of the Eddy Flux using pen and paper 4:45 PM – 6:00 PM Free Time 6:00 PM - 7:00 PM Monson's Musings Leaf fluxes - mathematical modeling - FURTHER READING from Belinda Medlyn 2016 Page Reading material - Photosynthesis measurements (Carl) Folder Russ Monson - The Eddy Flux File Hidden from students:FileDan Yakir - Stable Isotopes and Other Tracers to Complement Flux Measurements File Hidden from students:FileDave Bowling - Stable Carbon Isotopes of Carbon Dioxide in Ecosystem Science File Hidden