

TENTATIVE COURSE OUTLINE
AGRONOMY 960
H₂O & Elevated CO₂

1. Tues., 23 Aug. 2016 Introduction; Elevated atmospheric CO₂ and drought
2. Tues., 30 Aug. Elevated CO₂ in the soil: Composition of the soil atmosphere
3. Tues., 6 Sept. Elevated CO₂ in the soil: Interaction with the soil physical factors that affect root growth
4. Tues., 13 Sept. Elevated CO₂ in the atmosphere: Interaction with the soil physical factors that affect root growth
5. Tues., 20 Sept. Elevated CO₂ in the atmosphere: Root growth
6. Tues., 27 Sept. Elevated atmospheric CO₂: Plant water potential, osmotic potential, and turgor potential
7. Tues., 4 Oct. Elevated atmospheric CO₂: Stomatal conductance
8. Tues., 11 Oct. Elevated atmospheric CO₂: Stomatal density
9. Tues., 18 Oct. Elevated atmospheric CO₂: Transpiration & evapotranspiration
10. Tues., 25 Oct. Elevated atmospheric CO₂: Water use efficiency
11. Tues., 1 Nov. Elevated atmospheric CO₂: Plant anatomy
12. Tues., 8 Nov. Examination No. 1
13. Tues., 15 Nov. Elevated atmospheric CO₂: C₃ and C₄ plants
14. Tues., 22 Nov. Student holiday
15. Tues., 29 Nov. Elevated atmospheric CO₂: Phenology
16. Tues., 6 Dec. Elevated atmospheric CO₂: Growth and yield, including harvest index
17. Tues., 13 Dec. Examination No. 2 (4:10 to 5:00 p.m.) (see 2016 Final Examination Schedule)

AGRONOMY 960
GENERAL INFORMATION
H₂O & Elevated CO₂

Faculty: M.B. Kirkham
1108 Throckmorton Hall (Office)
1207 Throckmorton Hall (Laboratory)

Office talk telephone direct to office, and, if not there, secretary in main office answers:
785-532-0422

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Web site: <http://www.agronomy.k-state.edu/people/faculty/kirkham-mb/index.html>

Mail box:

Main Office, Department of Agronomy, 2004 Throckmorton Plant Sciences Center

Grading:

Two examinations of equal weight: 50% of grade

Written paper on topic about elevated carbon dioxide: 50% of grade

Text:

Elevated Carbon Dioxide: Impacts on Soil and Plant Water Relations, CRC Press, Taylor and Francis Group, Boca Raton, Florida, 2011, 399 pages. ISBN: 978-1-4398-5504-1

There is nothing on the Web for the class. All materials related to the class, aside from the textbook, will be given out as paper handouts.

Please note information about the University Honor System at <http://www.k-state.edu/honor/>

If anyone has a disability, please let me know so I can help.

There is no attendance policy. If you cannot take the examinations as scheduled (see syllabus for their dates and times), please let me know.

AGRONOMY 960
OBJECTIVES
H₂O & Elevated CO₂
August 23, 2016

To learn about the effects of elevated CO₂ on soil and plant water relations

To share material that I have learned through my experiences (e.g., professional travels; sabbatical leaves; what I read; interaction with colleagues), which is not found in standard journal articles, on the Web, or textbooks

To learn about people behind the science—i.e., the backgrounds of scientists we study