The UNIVERSITY OF FLORIDA IFAS

Welcomes you to the

50th Annual Conference of the North American Colleges and Teachers of Agriculture

“Teaching Students to Think and Reason”

JUNE 21-23, 2004
AGENDA

Monday, June 21, 2004

7:30am-5:00pm  Registration

8:00am-9:00am  Vice President and Regional Directors' Meeting - Dogwood

9:15am-11:30am  NACTA Executive Committee Meeting - Dogwood

12:00pm-2:30pm  Luncheon w/ 50th Anniversary Presentation - Century A

2:30pm-3:00pm  Refreshment Break - Prefunction Area

3:00pm-5:00pm  Three Concurrent Workshops  
(See page 5)

5:30pm-9:00pm  Poster Session & Book Auction Display set-up - Century B  
(See pages 12-13)

5:30pm-6:00pm  Welcome Reception - Pool Deck

6:00pm-7:30pm  Dinner - Century A
Tuesday, June 22, 2004

6:30am-12:00pm  Registration
7:00am-8:00am  Poster Session & Book Auction
                Display set-up - Century B
                (See pages 12-13)
7:00am-8:00am  Morning Refreshments - Century B
8:00am-9:15am  Blue Ribbon Presentation –
                Gail Kauwell, University of Florida/
                IFAS - Century A
9:15am-9:30am  Refreshment Break - Century B
9:15am-9:30am  Poster Session & Book Auction
                Display - Century B
                (See pages 12-13)
9:30am-10:30am NACTA Committee Meetings -
                Dogwood, Azalea & Hickory
10:30am-10:45am Break
10:45am-12:15pm Four Concurrent Sessions #1
                (See pages 6-7)
12:15pm-12:30pm Load Buses - Front of Conference
                Center
12:30pm-6:00pm Area Industry Tours
6:00pm-9:00pm  Free Evening - Optional Campus
                Tours (TBD)
7:00pm-9:00pm  Optional Grant Writing Workshop -
                Century C
**Wednesday, June 23, 2004**

7:00am-5:00pm  Registration

7:00am-8:00am  Morning Refreshments - *Century B*

7:00am-8:00am  Committee Meetings - *Century A*

**8:00am-10:00am**  **Four Concurrent Sessions #2**  
(See pages 8-9)

9:00am-4:30pm  Spouse Program - *St Augustine*

10:00am-10:30am  Refreshment Break - *Century B*

10:00am-10:30am  Poster Session & Book Auction Display - *Century B*  
(See pages 12-13)

10:30am-12:00pm  NACTA Business Meeting - *Century C*

12:00pm-2:00pm  Buffet Lunch & Teaching Roundtable Discussions - *Century A*

2:00pm-3:00pm  Refreshment Break - *Century B*

2:00pm-3:00pm  Poster Session - *Century B*  
(See pages 12-13)

**3:00pm-5:00pm**  **Four Concurrent Sessions #3**  
(See pages 10-11)

3:00pm-6:00pm  Remove Poster Displays and Media Displays - *Century B*

5:30pm-6:30pm  Reception - *Pool Deck*

6:30pm-8:30pm  Awards Banquet - *Century A*

8:30pm  Conference Concludes

**Thursday, June 24, 2004**

8:00am-10:00am  NACTA Executive Committee Meeting/Planning for 2005 Meeting - *Magnolia*

8:00am-10:00am  Shuttles to Airport
CONCURRENT WORKSHOPS

Monday, June 21, 2004 • 3:00pm-5:00pm
Page numbers refer to locations in the Abstract Book

WORKSHOP A - Century B
3:00pm  Multiple Intelligences, What Are They? – J. Cano and S. Whittington, The Ohio State University, Columbus, OH (p. 49)

4:00pm  Using Computers at a Higher Level to Teach at a Higher Level: Effective Instruction with Laptops and at a Distance – Bill Surver, K. Dale Layfield, John Cummings and Kerry Smith, Clemson University, Clemson, SC (p. 52)

WORKSHOP B - Century C
3:00pm  A Feedback Mechanism for Guiding Novice Graduate Teaching Assistants in Preparation for and Presentation of Effective Instruction – Maynard J. Iverson and John C. Ricketts, University of Georgia, Athens, GA (p. 50)

4:00pm  Teaching and Learning in a Large Botany Class – C. Gerald Van Dyke, North Carolina State University, Raleigh, NC (p. 53)

WORKSHOP C - Dogwood
3:00pm  A Classroom Performance System: Using a Question-Discussion-Feedback Learning Process to Inspire Students to Think and Reason – Gary Moore, Barry Croom and John Conoley, Department of Agricultural & Extension Education, North Carolina State University, Raleigh, NC (p. 51)

4:00pm  Critical and Creative Thinking Course Activities – Allen Zimmerman, The Ohio State University, Wooster, OH (p. 54)
# CONCURRENT SESSIONS #1

Tuesday, June 22, 2004 ● 10:45am-12:15pm

Page numbers refer to locations in the Abstract Book

## SESSION A - Century C

### 10:45am

**Excellence, Expertise, and Scholarship of Teaching in Agricultural, Environmental, Natural and Life Sciences** – N. A. Knobloch and A. L. Ball, University of Illinois, Urbana, IL; M. D. Woods, Michigan State University, East Lansing, MI  (p. 18)

### 11:15am

**Peer Review of Teaching: How Do I Prepare to Be a “Peer”** – M. Susie Whittington and Jamie Cano, The Ohio State University, Columbus, OH  (p. 42)

### 11:45am

**The Cost of Distance Education: A Florida Experience** – Allen F. Wysocki, James A. Sterns, Lisa A. House and Gary F. Fairchild, University of Florida/IFAS, Gainesville, FL; Suzanne Thornsbury, Michigan State University, East Lansing, MI  (p. 45)

## SESSION B - Dogwood

### 10:45am

**Exploring the Reliability of Using the Learning Environment Preference Inventory as a Valid Measure of Perry’s Scheme of Intellectual Development of College Students** – Catherine Lavis, Kansas State University, Manhattan, KS  (p. 20)

### 11:15am

**A Comparison of the Effectiveness of Two Educational Techniques: Informational Brochures vs. Cooperative Learning Activities** – N. E. Fuhrman, D. W. Duncan and C. A. Copenheaver, Virginia Polytechnic Institute and State University, Blacksburg, VA  (p. 12)

### 11:45am

**Using an Online Modified Delphi Approach for the Development of Competency Profiles** – L. A. Watkins, Central Missouri State University, Warrensburg, MO; K. J. Bacon, Western Illinois University, Macomb, IL  (p. 40)
SESSION C - Azalea

10:45am Determining the Qualities Agricultural Employers Want in Future Employees – K. J. Bacon and R. M. Anderson, Western Illinois University, Macomb, IL; L. A. Watkins, Central Missouri State University, Warrensburg, MO (p. 3)

11:15am Effectiveness of AGB 101 in Changing Students’ Attitudes toward the Agribusiness Major and Careers – Lynn Hamilton, Cal Poly State University, San Luis Obispo, CA (p. 15)

11:45am Job Seeking Skills: Teaching Students to Think, Reason, and ACT – Michael D. McDermott, Eastern Kentucky University, Richmond, KY (p. 24)

SESSION D - Hickory

10:45am Using Marketing Concepts to Enhance Student Enrollment in Colleges of Agriculture – E. Jane Luzar, Emily S. Sperling and Larry J. Connor, University of Florida/IFAS, Gainesville, FL (p. 22)

11:15am Meeting Upper-level Agriculture Course Prerequisites: Where Have All the Students Gone? – C. Robert Stark, Jr., Paul B. Francis, Whitney A. Whitworth and Kelly J. Bryant, University of Arkansas at Monticello, Monticello, AR (p. 35)

11:45am The Role of Absenteeism on Student Grades in Two Horticulture Courses – Jerry M. Williams and Dennis W. Duncan, Department of Horticulture and Agricultural and Extension Education, Virginia Polytechnic Institute and State University, Blacksburg, VA (p. 44)
CONCURRENT SESSIONS #2

Wednesday, June 23, 2004 • 8:00am-10:00am
Page numbers refer to locations in the Abstract Book

SESSION E - Century C

8:00am Teaching Critical Thinking Skills in the Context of Biotechnology – Curt R. Friedel, John C. Ricketts, Tracy A. Irani, Rick D. Rudd and Maria Gallo-Meaghar, University of Florida/IFAS, Gainesville, FL (p. 11)

8:30am Forests for the Future: Critical Thinking in an Undergraduate Forestry Course – Trina Hofreiter and Martha C. Monroe, School of Forest Resources and Conservation, University of Florida/IFAS, Gainesville, FL (p. 17)

9:00am Using Writing to Promote Thinking in a First Year Agriculture Course at the University of the West Indies – L. B. Roberts-Nkrumah, Department of Food Production, Faculty of Science and Agriculture, University of the West Indies, St. Augustine, Trinidad and Tobago (p. 33)

9:30am Teaching Thinking Skills – B. G. Swan and J. Cano, The Ohio State University, Columbus, OH (p. 36)

SESSION F - Dogwood

8:00am Learning Objects for Environmental Sciences – Joanne Logan and Michael Guidry, University of Tennessee, Knoxville, TN (p. 21)

8:30am The Value of a Legislative Internship: A Case Study – Kathryn Manley, Michael T. Olexa, Allen F. Wysocki, James A. Sterns and Gary F. Fairchild, University of Florida/IFAS, Gainesville, FL (p. 23)

9:00am Enhancing the Crop Science Laboratory Experience – Gerry L. Posler, Department of Agronomy, Kansas State University, Manhattan, KS (p. 31)

9:30am Throwing Out the Cookbook: Student Planned and Executed Laboratories – Elizabeth M. Lamb, Indian River Research and Education Center, University of Florida/IFAS, Fort Pierce, FL (p. 19)
SESSION G - Azalea

8:00am  Trade-offs in Agriculture and Natural Resources: An Issues Course Designed for Non-Majors – M. D. Mullen, University of Kentucky, Lexington, KY; D. M. Ostermeier, J. L. Pavey and E. Buckner, University of Tennessee, Knoxville, TN  (p. 26)

8:30am  Multimedia Instrument for Greenhouse Education: Designing for User Needs and Higher-Order Thinking – Milton E. Tignor (Buddy), University of Vermont, Burlington, VT; Sandra B. Wilson, University of Florida/IFAS, Fort Pierce, FL; Tracy A. Irani, University of Florida/IFAS, Gainesville, FL; Gene A. Giacomelli and Chieri Kubota, The University of Arizona, Tucson, AZ; Margaret J. McMahon, The Ohio State University, Columbus, OH  (p. 38)

9:00am  What Are Students Thinking during a Typical College Lecture? – M. Susie Whittington and John Ewing, The Ohio State University, Columbus, OH  (p. 43)

9:30am  Learning from the Wisdom of Practice: Engaging Agriculture, Food, and Natural Resources Faculty to Become Reflective Practitioners – Anna Ball and Neil Knobloch, University of Illinois at Urbana Champaign; Michael Woods, Michigan State University, East Lansing, MI  (p. 5)

SESSION H - Hickory

8:00am  Using Field Experiences to Enhance Student Learning – Rhonda L. Miller, Rudy S. Tarpley, Nancy E. Thompson and Bruce E. Miller, Department of Agricultural Systems Technology and Education, Utah State University, Logan, UT  (p. 25)

8:30am  Critical Thinking as a Function of Experiential Learning in Oral Communication – Travis Park, Nicole Stedman, Chris Morgan and Rick Rudd, University of Florida/IFAS, Gainesville, FL  (p. 30)

9:00am  A Sophomore Pre-Capstone Seminar to Prepare Students for Internships and Independent Learning Experiences – M. A. Wattiaux, University of Wisconsin-Madison, Madison WI  (p. 41)
**CONCURRENT SESSIONS #3**

**Wednesday, June 23, 2004 • 3:00pm-5:00pm**

Page numbers refer to locations in the Abstract Book

**SESSION I - Century C**

3:00pm  **Service Learning and National Youth Service Day – Jean A. Gleichsner,** Agriculture Department, Fort Hays State University, Hays, KS  (p. 13)

3:30pm  **Choice of a Service-learning or Non Service-learning Senior Seminar Section-Student Characteristics, Fulfillment of Learning Objectives, and Instructor Evaluation: A Case Study – C. E. O’Neil,** School of Human Ecology; Louisiana State University; Baton Rouge, LA;  
**B. L. Matthews** and **H. Anton,** Centers for Excellence in Learning and Teaching; Louisiana State University; Baton Rouge, LA  (p. 29)

4:00pm  **Journal-Based Reflection in Undergraduate Service Learning and the University Therapeutic Riding Center – A. A. Pyle, H. A. Brady, D. E. Lawver, C. L. Akersand, N. T. Cepica,**  
1Department of Animal and Food Sciences, Texas Tech University, Lubbock, TX; 2Department of Agricultural Education and Communication, Texas Tech University, Lubbock, TX; 3University Medical Center, Texas Tech University, Lubbock, TX  (p. 32)

4:30pm  **Teaching for Critical Thinking in an Undergraduate Service Learning Course – Rick D. Rudd,** Agricultural Education and Communication, University of Florida/IFAS;  
**Bobbi Langkamp-Henken** and **Kelli Herrlinger-Garcia,** Food Science and Human Nutrition, University of Florida/IFAS, Gainesville, FL  (p. 34)

**SESSION J - Dogwood**

3:00pm  **The Determinants of College Student Performance: The Role of Assessment Method – Andrew Barkley,** Kansas State University, Manhattan, KS  (p. 6)

3:30pm  **Does Focusing on Individual Students Perceptual Learning Needs Enable Students to Achieve More Successfully? – Andrew J. Baker** and **Tim Phillips,** Western Illinois University, Macomb, IL  (p. 4)

4:00pm  **Assessment of Student Learning by Use of Pre and Post-Testing – M. E. Headings,** The Ohio State University, Wooster, OH  (p. 16)
4:30pm  An SOTL Project Investigating Student Understanding of Molecular Genetics Concepts – Bonnie S. Walters and Tim Buttles, University of Wisconsin - River Falls, River Falls, WI  (p. 39)

SESSION K - Azalea
3:00pm  Challenges of Objectively Assessing Thought Processes – Jennifer R. Batchelder and R. Kraig Peel, Western Center for Integrated Resource Management, Colorado State University, Fort Collins, CO  (p. 7)
3:30pm  Influence of Leadership Style, Learning Style, and Leadership Adaptability on Critical Thinking Disposition – Kimberly Bellah and James E. Dyer, University of Florida/IFAS, Gainesville, FL  (p. 9)
4:00pm  Influence of Student Learning Styles on Critical Thinking Skills – Brian E. Myers and James E. Dyer, University of Florida/IFAS, Gainesville, FL  (p. 27)
4:30pm  A Comparison of Learning Styles, Academic Majors and Selected Demographic Characteristics of Agricultural Students at Abraham Baldwin Agricultural College – Garvie Nichols, Jr., John C. Ricketts, Frederick R. Rohs and Maynard J. Iverson, Department of Agricultural Leadership, Education, and Communication, University of Georgia, Athens, GA  (p. 28)

SESSION L - Hickory
3:00pm  Promoting Interactive Learning with an Electronic Student Response System – E. F. Bazen and C. D. Clark, University of Tennessee, Knoxville, TN  (p. 8)
3:30pm  A Virtual GIS Computer Lab for On-Campus and Distance Education Students – S. Grunwald1, V. Ramasundaram2 and D. K. Jesseman3; 1Soil and Water Science Department, University of Florida/IFAS, FL (NACTA member); 2 Computer and Information Science and Engineering, University of Florida, Gainesville, FL; 3Institute of Food and Agriculture (IFAS) - Information Technology (IT), University of Florida/IFAS, Gainesville, FL  (p. 14)
4:00pm  Virtual Plant Identification and Landscape Design – Helen E. Danielson and Sandra B. Wilson, University of Florida/IFAS, Fort Pierce, FL; Richard K. Schoellhorn, University of Florida/IFAS, Gainesville, FL  (p. 10)
4:30pm  Reaching Students with Communication Technologies – Ricky Telg and Tracy Irani, University of Florida, Gainesville, FL  (p. 37)
POSTER DIRECTORY
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1. Teaching Students to Teach Themselves through a Self-Guided Science Lab – Rebecca Baldwin, Department of Entomology and Nematology, University of Florida/IFAS, Gainesville, FL (p. 57)

2. Recruiting Expansion for Agricultural Education – Jennifer R. Batchelder and R. Kraig Peel, Western Center for Integrated Resource Management, Colorado State University, Fort Collins, CO (p. 58)


4. Developing a Scholarship of Teaching and Learning (SoTL) Project – Tim Bultles and Bonnie S. Walters, University of Wisconsin - River Falls, River Falls, WI (p. 60)

5. Through the Digital Lens … – D. D. Cartmell, J. K. Cox and S. R. Sitton, Oklahoma State University, Stillwater, OK (p. 61)

6. Preparing Professors to Teach in the Laboratory Setting – John C. Ewing, Benjamin G. Swan and M. Susie Whittington, The Ohio State University, Columbus, OH (p. 62)

7. USDA Funding Opportunities – Gregory Smith, USDA, Washington, D.C.

8. The College of Agricultural & Life Sciences Honors Colloquium: Teaching and Learning ‘Outside the Box’ – David Jones and Rick Rudd, Agricultural Education and Communication Department, University of Florida/IFAS; Katie Sieving, Wildlife Ecology & Conservation, University of Florida/IFAS; E. Jane Luzar, College of Agricultural and Life Sciences, University of Florida/IFAS, Gainesville, FL (p. 63)

9. Using Experiential Learning to Enhance Knowledge about Sustainable Whole Farm Systems – H. D. Karsten, Assistant Professor, Department of Crops and Soils, The Pennsylvania State University, PA; T. S. Hoover and E. Santiago, Department of Agricultural and Extension Education, The Pennsylvania State University, PA (p. 64)

10. Professional Development Workshops – Brian E. Myers and Shannon G. Washburn, University of Florida/IFAS, Gainesville, FL (p. 65)

11. Teaching Food Economics and Menu Planning to Dietetics Students – J. D. Myhand and C. E. O’Neil, School of Human Ecology, Louisiana State University; Baton Rouge, LA (p. 66)
12. **Agricultural Knowledge Assessment: Does FFA Membership Make a Difference?** – Seburn L. Pense¹, James G. Leising² and Dexter B. Wakefield³; ¹Southern Illinois University, Department of Plant, Soil and Agricultural Systems, Carbondale, IL; ²Oklahoma State University, Department of Agricultural Education, Communications & 4-H, Youth Development, Stillwater, OK (p. 67)

13. **Critical Thinking Instructional Model for Food Biotechnology** – Emily B. Rhoads, Curt Friedel, Tracy A. Irani, Rick D. Rudd and Maria Gallo-Meagher, University of Florida/IFAS, Gainesville, FL (p. 68)

14. **Integrating Video and Digital Photography into College Classes** – Ricky Telg, University of Florida, Gainesville, FL (p. 69)

15. **Beyond Google: Incorporating Information Competency into the Classroom** – Frank Vuotto and Lynn Hamilton, Cal Poly State University, San Luis Obispo, CA (p. 70)

16. **Networking and Collaboration for Strong Off-campus Programs** – Sudeep Vyapari, University of Florida/IFAS, MREC Plant City, FL; S. M. Scheiber, University of Florida/IFAS, MREC Apopka, FL (p. 71)

17. **Success Strategies for Agriculture: What Should a Course with This Title Contain?** – L. A. Watkins, Missouri Center for Career Education, Central Missouri State University, Warrensburg, MO; K. J. Bacon, Western Illinois University, Macomb, IL (p. 72)

18. **The Learner-Centered Classroom: An Overview and Implications for College Teachers of Agriculture, Environmental, Natural and Life Sciences** – Michael D. Woods, ANR Education & Communications Systems Department, Michigan State University, East Lansing, MI; Neil A. Knobloch and Anna L. Ball, University of Illinois at Urbana Champaign, IL (p. 73)
COMMITTEE LISTS

2004 NACTA Planning Committee
Jimmy Cheek - Dean
E. Jane Luzar - Associate Dean
Rick Rudd - Chair
Paul Willis - Program
Erin Howlett - Program Assistant
Dianne Kattawar - Conference Coordinator

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Special thanks to
The College of Agriculture and Life Sciences
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BLUE RIBBON PRESENTATION

Gail P. A. Kauwell, PhD, RD, LDN
Associate Professor
Food Science and Human Nutrition Department
Institute of Food and Agricultural Sciences
University of Florida

Dr. Gail Kauwell is an Associate Professor in the Food Science and Human Nutrition Department at the University of Florida. She teaches undergraduate and graduate courses in nutrition and dietetics, directs the combined Master of Science-Dietetic Internship Program and conducts research on the impact of genetic polymorphisms on folate and vitamin B12 metabolism and requirements. Her research has been published in leading nutrition journals.

Dr. Kauwell loves to teach, and she derives great satisfaction in helping students develop and achieve their goals and aspirations. An educator for over 20 years, Dr. Kauwell has had the privilege of working with numerous bright, talented and hard working students, many of whom are now enjoying successful careers as medical/health care professionals, educators, and researchers.

Dr. Kauwell has been the recipient of several teaching awards including the University of Florida Undergraduate Teacher of the Year, the American Dietetic Association Outstanding Dietetics Educator (southeast region), and the National Association of State Universities and Land Grant Colleges Teacher of the Year.