**Auburn University**

**CTCT 7400 Syllabus**

1. Course Number: CTCT 7400

Course Title: Agricultural Literacy Education

Credit Hours: 3 Semester Hours

Prerequisites: None

Corequisites: None

2. Term: Spring 2023

**Day/Time:** Class Hours: Distance Canvas

**Instructor:** David Chapman, Ph.D.

Office Address: 3084 Haley Center

Contact Information: Office Phone: 678-232-7509

Email: dlc0037@auburn.edu

Office Hours: by appointment

3. Text and Major Resources:

There is no required text for the course. All assigned readings (journal articles & relevant literature) will be provided.

Au, K. H. (1998). Social constructivism and the school literacy learning of students of diverse backgrounds. *Journal of Literacy Research, 30*(2), 297-319. http://doi.org/10.1080/10862969809548000

Clemons, C., Lindner, J. R., Murray, B., Cook, M. P., Sams, B., & Williams, G. (2018). Spanning the gap: The confluence of agricultural literacy and being agriculturally literate. *Journal of Agricultural Education (59)*4, 238-252*.* Retrieved from https://doi.org/10.5032/jae.2018.04238

Brandt, K. (2007, May). *Issues paper: Organic agriculture and food utilization*. Paper presented at the International Conference on Organic Agriculture and Food Security, Italy. Paper retrieved from http://www.fao.org/3/a-ah951e.pdf

Food and Agriculture Organization of the United Nations. (2003a). *Agricultural extension, rural development and the food security challenge.* Retrieved from http://www.fao.org/docrep/006/Y5061E/Y5061E00.HTM

Food and Agriculture Organization of the United Nations. (2003b). *Trade reforms and food security: Conceptualizing the linkages.* Retrieved from http://www.fao.org/docrep/005/y4671e/y4671e00.htm#Contents

Food and Agriculture Organization of the United Nations. (2014). *Building a common vision for sustainable food and agriculture: Principles and approaches.* Retrieved from http://www.fao.org/sustainability/background/en/

Food and Agriculture Organization of the United Nations. (2015). *The state of food and agriculture 2015- Social protection and agriculture: Breaking the cycle of rural poverty.* Retrieved from http://www.fao.org/sustainable-development-goals/goals/goal-1/en/

Food and Agriculture Organization of the United Nations. (2016a). *Climate is changing: Food and agriculture must too.* Retrieved from http://www.fao.org/documents/card/en/c/I9860EN

Food and Agriculture Organization of the United Nations. (2016b). *Planning, implementing and evaluating climate-smart agriculture in smallholder farming systems.* Retrieved from http://www.fao.org/publications/card/en/c/2ac2b364-41b1-42de-a049-720542f18a2c/

Food and Agriculture Organization of the United Nations. (2016c). *Pulses: Nutritious seeds for a sustainable future.* Retrieved from http://www.fao.org/3/a-i5528e.pdf

Food and Agriculture Organization of the United Nations. (2018). *Ending extreme poverty in rural areas: Sustaining livelihoods to leave no one behind*. Retrieved from http://www.fao.org/reduce-rural- poverty/resources/resources-detail/en/c/1157795/

Frick, M. J., Birkenholz, R. J., & Machtmes, K. (1995). Rural and urban adult knowledge and perceptions of agriculture. *Journal of Agricultural Education, 36*(2), 44-53. http://doi.org/10.5032/jae.1995.02044

Georges, F. & Ray, H. (2017). Genome editing of crops: A renewed opportunity for food security. *GM Crops & Food, 8*(1):1-12. Retrieved from https://doi.org/10.1080/21645698.2016.1270489

Goodwin, J. N., Chiarelli, C., & Irani, T. (2011). Is perception reality? Improving agricultural messages by discovering how consumers perceive messages. *Journal of Applied Communications, 95*(3), 21-33. http://doi.org/10.4148/1051-0834.1162

Kovar, K. A., & Ball, A. L. (2013). Two decades of agricultural literacy research: A synthesis of the literature. *Journal of Agricultural Education, 54*(1), 167-178. Retrieved from http://doi.org/10.5032/jae.2013.01167

Lundy, L., Ruth, A., Telg, R., & Irani, T. (2006). It takes two: Public understanding of agricultural science and agricultural scientists’ understanding of the public. *Journal of Applied Communications, 90*(1), 55-68. Retrieved from http://doi.org/10.4148/1051-0834.1290

Mars, M. M., & Ball, A. L. (2016). Ways of knowing, sharing, and translating agricultural knowledge and perspectives: Alternative epistemologies across non-formal and informal settings. *Journal of Agricultural Education, 57*(1), 56-72. Retrieved from http://doi.org/10.5032/jae.2016.01056

O’Brien, D. G., Stewart, R. A., & Moje, E. B. (1995). Why content literacy is difficult to infuse into the secondary school: Complexities of curriculum, pedagogy, and school culture. *Reading Research Quarterly, 30*(3), 442-463. Retrieved from http://doi.org/10.2307/747625

Roberts, T. G., Harder, A., & Brashears, M. T. (Eds.). (2016). *American Association for Agricultural Education national research agenda: 2016-2020.* Gainesville, FL: Department of Agricultural Education and Communication.

Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content- area literacy. *Harvard Educational Review, 78*(1), 40-59. Retrieved from http://doi.org/10.17763/haer.78.1.v62444321p602101

Shanahan, T., & Shanahan, C. (2012). What is disciplinary literacy and why does it matter? *Topics in Language Disorders, 32*(1), 7-18. Retrieved from http://doi.org/10.1097/TLD.0b013e318244557a

Stofer, K. A., & Newberry, III, M. G. (2017). When defining agriculture and science, explicit is not a bad word. *Journal of Agricultural Education, 58*(1), 131-150. Retrieved from http://doi.org/10.5032/jae.2017.01131

Whitaker, B. K. & Dyer, J. E. (2000). Identifying sources of bias in agricultural news reporting. *Journal of Agricultural Education, 41*(4), 125-133. Retrieved from http://doi.org/10.5032/jae.2000.04125

This course will require the use of Canvas. Canvas can be accessed from the Auburn University website through AU Access.

**4. Course Description:**

Theories and application of agricultural literacy related scientific and technologically based concepts and processes required for personal decision making, participating in civic and cultural affairs, and economic productivity.

Most of the U.S. population are not agriculturally literate. Growing global populations, urbanization of populations and aging farmers exacerbates the agricultural literacy problem. Mercier notes a lack of research on agricultural literacy prevents educational programs from expanding and recommends research on broad population to better understand the problem.

**5. Course Objectives:**

Upon completion of this course, students will be able to:

1. Define agricultural literacy in the context of food security, safety, and production

2. Understand how agricultural literacy fits in the American Association of Agricultural Education National Research Agenda with particular attention to methods, models, and programs that are effective for informing public opinions about agricultural and natural resources issues and preparing people to inform policy makers on agricultural and natural resources.

3. Discuss challenges with teaching agricultural vocabulary to students including articulation of how reading comprehension is necessary for learning.

4. Teach students how to use vocabulary to help students learn contentious topics such as Climate Change or GMOs.

5. Synthesize scientific literature and help the public understand where their food comes from.

6. Apply the Four Mental Operations in Concept Learning Model to agricultural literacy to improve their students and their own agricultural literacy.

7. Help students become agriculturally literate and have agricultural literacy and to teach them how to communicate agricultural literacy.

**6. Course Content/Calendar**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Course Topic** | **Readings** | **Assignment** |
| **Course Introduction**  1/11-1/22 | Introduction and Course Expectations/Overview | Syllabus  FAO www.fao.org | Introductions  Course Review |
| **Module 1**  1/23-1/29 | Literacy and being literate: How do they differ?  Food security: concepts and measurement | Clemons (2018)  FAO (2003b) Ch. 2 | Discussion 01 |
| **Module 2**  1/30-2/5 | Understanding content literacy | O’Brien (1995) Shanahan (2008) | Discussion 02 |
| **Module 3**  2/6-2/12 | Understanding disciplinary literacy | Shanahan (2012) | Discussion 03 |
| **Module 4**  2/13-2/19 | What does it mean to be agriculturally literate?  Climate-Smart Agriculture: Planning, implementing, and evaluating | Mars (2016)  FAO (2016b) | Discussion 04 |
| **Module 5**  2/20-3/5 | How do agriculture professionals define agricultural literacy? AAAE and Agricultural Literacy  Changing climate: Food and agriculture | Roberts (2016)  Kovar (2013)  FAO (2016a) | Discussion 05 |
| **Spring Break (3/6-3/12)** | | | |
| **Module 6**  3/13-3/19 | Defining agriscience  Sustainability | Stofer (2017)  FAO (2014) | Discussion 06 |
| **Module 7**  3/20-3/26 | Literacy learning of students with diverse backgrounds  Poverty | Au (1998)  FAO (2015) | Discussion 07 |
| **Module 8**  3/27-4/2 | Rural perceptions of agriculture  Rural development and extension | Frick (1995)  FAO (2018)  FAO (2003a) | Discussion 08 |
| **Module 9**  4/3-4/9 | Agricultural literacy: Consumer and public understanding of agricultural literacy  GMOs & gene editing  Pulses: Nutritious seeds for a sustainable future | Goodwin (2011) Lundy (2006)  Georges (2017)  FAO (2016c) | Discussion 09 |
| **Module 10**  4/10-4/16 | Agricultural literacy: Identifying bias  Organic | Whitaker (2000)  Brandt (2007) | Discussion 10 |
| **Final Project**  4/17-4/30 | **Application Project** |  | **Application Project Due** |

**7.** **Assignments/Projects:**

1. **Complete the assigned readings for each week.**
2. **Participate in all class discussions:** Each week you should respond to the discussion prompt with a well-formed discussion post. Your discussion should reflect upon the readings and personal experiences. In addition to your discussion post, you should also respond to a minimum of two classmate’s posts. Your responses should facilitate discussion and provide thoughtful insight to the post. **Each response to classmates should be a minimum of five sentences.**
3. **Application Project:** Your assignment is to develop a 2-3 page, well formed, grammatically correct paper [single-spaced, 12 pt times new roman font, 1” margins, APA Formatting] based on your reading of the assigned material and other material. The cover and reference pages do not count toward the indicated page count.

1. Review the topics, required readings, and other materials as needed.

2. Write a quarter page reflection on your thoughts of the topics and assigned readings. What were your expectations? What were your thoughts on the subject matter?

3. Identify a group of key words, terms, phrases, etc. (five to eight; more if you like) in the topics/readings for which naïve readers might have acquaintance knowledge, but not ownership, defined as the ability to understand the word instantly in reading or listening and to use it accurately in speaking or writing.

4. Develop an initial presentation for these words that include plain-language explanations, examples, and non-examples, supplemented by visuals (as needed). The goal is to “locate” the meaning boundaries of the word. Make simple judgments about the terms and complete a sentence starter that includes the term.

5. “Relate” words by combining two or more of the terms in “possible sentences,” i.e., sentences that correctly recognize the distinction and meaning boundaries of the words, while making a plausible guess about a factual situation.

6. “Extricate” the word from its original context and apply it in a new context.

7. Finally, “generate” new sentences expressing true statements that use the word.

8. Now write a half page summary on your thoughts. Going through this process with the terms you chose, what do you think of them? Did your understanding of them change? Improve? Did your thoughts on the topic/readings change from your reflection?

**Rubrics and Grading Scale:**

|  |  |
| --- | --- |
| **Points for each**  **Graded Activity** | **Total points available** |
| Discussions (10) 75   * Original Post-55 pts * Peer-response Posts-10 pts each | 750 |
| Application Project 250 | 250 |
| Total Points Available | 1,000 |

**Grading Rubric:**

75% Content

15% Grammatical

10% APA Style

**The following grading scale will be used:**

|  |  |
| --- | --- |
| 90 - 100 % | A |
| 80% - 89.9% | B |
| 70% - 79.9% | C |
| 60% - 69.9% | D |
| Below 60% | F |

**8. Class Policy Statements:**

**Participation:** Students are expected to participate in all class discussions and participate in all exercises. Assignments/discussion posts are due on announced dates. Unexcused late assignments are unacceptable. It is the student’s responsibility to contact the instructor if assignment deadlines are not met. Students are responsible for initiating arrangements for missed work. Students must satisfy all course objectives to pass the course.

**Professionalism:** As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College’s conceptual framework. These professional commitments or dispositions are listed below:

* Engage in responsible and ethical professional practices
* Contribute to collaborative learning communities
* Demonstrate a commitment to diversity
* Model and nurture intellectual vitality

**Excused Absences**:  Students are granted excused absences from class for the following reasons:  Illness of the student or serious illness of a member of the student’s immediate family, the death of a member of the student’s immediate family, trips for student organizations sponsored by an academic unit, trips for University classes, trips for participation in intercollegiate athletic events, subpoena for a court appearance, and religious holidays.  Students who wish to have an excused absence from this class for any other reason must contact the instructor in advance of the absence to request permission.  The instructor will weigh the merits of the request and render a decision. When feasible, the student must notify the instructor prior to the occurrence of any excused absences, but in no case shall such notification occur more than one week after the absence.  Appropriate documentation for all excused absences is required.  Please see the [*Student Policy eHandbook*](http://www.auburn.edu/student_info/student_policies/) for more information on excused absences (http://www.auburn.edu/student\_info/student\_policies/).

**Make-Up Policy:**Arrangement to make up missed major examination (e.g. hour exams, mid-term exams) due to properly authorized excused absences must be initiated by the student within one week from the end of the period of the excused absences.  Except in unusual circumstances, such as continued absence of the student or the advent of University holidays, a make-up exam will take place within two weeks from the time that the student initiates arrangements for it. Except in extraordinary circumstances, no make-up exams will be arranged during the last three days before the final exam period begins.  The format of the make-up exam will be (as specified by instructor).

**Course contingency:** If normal class and/or lab activities are disrupted due to illness, emergency, or crisis situation, the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials.

**9. Academic Honesty Statement:**

All portions of the Auburn University student academic honesty code (Title XII) found in the [*Student Policy eHandbook*](http://www.auburn.edu/student_info/student_policies/)will apply to this class.  All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

**10. Students with Disabilities Statement:**

“Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).”

**11. Justification for Graduate Credit:**

The course is taught at an advanced level and requires extensive student participation and self- direction. Students will be required to review, interpret, and analyze a vast amount of literature related to agricultural literacy. Grading in the course is based on students’ synthesis of a vast amount of technical literature and governmental reports and preparation of a technical application project.