ALS 2410 - Challenge 2050: Global Uncertainty
3 Credits, Fall Semester 2018
Mondays 4:10 PM – 4:55 PM, Period 9
Wednesday 4:10 PM – 6:00 PM, Periods 9-10
TUR L005

Instructor Information
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Additional Support – Challenge Advocate
Kate Rose – kate.rose0210@ufl.edu
Victoria Gibney – Victoria.hunter@ufl.edu

Course Overview
This introductory course explores questions in human well-being and sustainability and builds a foundation for addressing global challenges associated with population growth. Transdisciplinary experts will lead diverse and innovative experiences engaging students in discussion-based inquiry, complex adaptive problem solving, and the integration of economic, environmental, food, health, and social systems’ perspectives.

Context for The Challenge
By the year 2050, the global human population is projected to exceed 9 billion people. This is our 2050 Challenge. It requires innovative development of interdisciplinary solutions to complex, global challenges. We need you, our future global leaders, to address the challenges we face as a global community.

This course is meant to serve as the introductory course in the Global Challenge 2050 Certificate curriculum but is open to anyone looking to improve their critical thinking and leadership skills. It will
provide an overview to the Challenge 2050 Project mission by sampling various topics that contribute to students’ understanding of how to address the world’s complex problems. Throughout the semester, students will be exposed to innovative and cutting-edge topics in areas related to food, economic, environment, social, and health systems. Students are encouraged to engage in discussion, ask questions about the topics, seek sources of information to answer these questions, and explore how to implement what we have learned in class and outside of class to develop solutions to humanities’ global challenges.

**What is the Course Really About?**

Albert Einstein said, "We cannot solve problems with the same thinking we used when we created them". This idea is paramount for our class. You will be asked to fully engage with and address a complex world problem. This is not an easy challenge. However, like all challenges, it is ripe with opportunity. What you will experience in this class is a non-traditional education, but a workshop designed to equip you with the tools to sustain our world. As students in this class, you are the experts and will create the foundation for addressing the some of the biggest issues in the history of our planet. We recognize that you may not have the answers but have faith in your ability to find them. You are our future. Without you, there are unspeakable hardships in store for our planet and it’s soon to be 9 billion residents. The Challenge is real. The only question is what role you play in addressing it. Welcome to Challenge 2050 and the Global Challenge Certificate!

**Course Objectives**

Given participation in the course, students will have the opportunity to engage in the mastery of the following objectives:

1) Develop an appreciation for the intersection between social and natural sciences necessary for addressing global challenges
2) Apply systems thinking within local, regional, and global contexts
3) Use critical thinking to solve problems
4) Recognize and act upon leadership opportunities as a global citizen

**Course Structure**

This course will be an adventure. Each class period will be devoted to the dissection of the designated topic. This dissection will include a discussion of prescribed theory or ideology as outlined by the course materials. The discussion will be followed by a candid debate of said theory’s merit. Finally, we will test our perspective using case studies to further enhance our understanding of the concept. Students will also have an opportunity to facilitate activities to enhance their development and the development of their classmates later in the semester.

This course will challenge many of your perspectives and affirm others. Attend class with readiness and an eagerness to defend and debate your perspectives.

**Course Materials**

*The following books is required:*


*The following book is recommended:*

Other readings will be provided for the course related to weekly topics engaging students in domestic and global current events.

Course Requirements

Reflections – Students will be asked to post weekly online entries with respect to the given prompt on the class Canvas website. The prompts require students to apply the previous week’s course content to their lives, communities, and/or current regional/global events. Students are expected to demonstrate quality depth of thought, critical thinking, and creativity via their posts. More details will be provided in class.

Group Project & Presentation – Students will be assigned to a team that represents one of the five systems (i.e., food, economic, environment, social, and health). Working as a team, students will 1) develop a strategic innovation or plan aimed at addressing the 2050 challenge with respect to their assigned system, and 2) present their plan to a diverse audience of students, faculty, business leaders and others. More details will be provided in class.

You are permitted the autonomy and creative freedom to convey your Group Project & Presentation by any means necessary. Show your genius and produce a quality product worthy of your education.

Identifying Leaders Activity – Part of leadership development is learning from others. With that, you will find a leader who you believe is solving the 2050 Challenge—either locally, nationally or internationally. What is their approach to this problem? What is their venue for communicating their solutions? How effective do you believe they are as leaders addressing this issue? Once identified, you will develop a one-page paper on this leader and share your leader with the rest of the class. More details will be provided in class.

Your Solution to the Challenge - Systems Synthesis Paper – Throughout the semester, students will develop perspectives about addressing the 2050 challenge. Through this assignment, students are asked to synthesize these perspectives and create an individual strategic innovation or plan integrating all five systems (i.e., food, economic, environment, social, and health) to address the 2050 challenge. The innovation or plan summary is limited to 15 pages, double-spaced, 12-point font. More details will be provided in class.

Final Reflection – Upon completion of the class, students are asked to reflect on what each of them will take from the course and what they will apply in future interactions. Student perspectives should be grounded in their attitudes and behaviors that will ultimately lead to addressing challenge 2050. More details will be provided in class.

You are permitted the autonomy and creative freedom to convey your Final Reflection by any means necessary. Show your genius and produce a quality product worthy of your education.

Engagement – This class only works when you are here to actively engage in the content and the conversation. With that, active participation is critical to our course. Students are asked to embrace this idea and provide thought provoking perspectives and researched facts that support our collective ability to address the 2050 challenge. Student will be evaluated on depth of thought, direction of perspectives, and overall benefit to the class and our collective learning. More details will be provided in class.
Course Grading
Grades will be earned based on the degree to which the student fulfills the assigned requirements for the designated project, integrates course discussions and perspectives, provides support from the literature for his or her findings, and synthesizes his or her own independent thought into the assignment.

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<tr>
<th>Assignments</th>
<th>Points</th>
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<tr>
<td>Individual Reflections (13 x 15 pts. each)</td>
<td>195</td>
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<tr>
<td>Identifying Leaders Activity</td>
<td>100</td>
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<tr>
<td>Group Project</td>
<td>100</td>
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<tr>
<td>Group Presentation</td>
<td>50</td>
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<tr>
<td>Systems Synthesis Paper</td>
<td>200</td>
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<tr>
<td>Final Reflection</td>
<td>100</td>
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<tr>
<td>Engagement</td>
<td>255</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>1,000</strong></td>
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Course Grading Scale:

- A: 93.4-100%
- A-: 90-93.3%
- B+: 86.7-89.9%
- B: 83.4-86.6%
- B-: 80-83.3%
- C+: 76.7-79.9%
- C: 73.4-76.6%
- C-: 70-73.3%
- D+: 66.7-69.9%
- D: 63.4-66.6%
- D-: 60-63.3%
- E: <60.0%

University of Florida Grade & Grade Points Policy can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester. Students will be given specific times when the evaluations are available. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

Course Policies

Absences: It is an expectation that you attend every class session. This will be an intensive attempt at gaining the foundation of leadership theory and its application to practice confined by the university calendar to a 16-week period. Because of this and the value of our class interactions, it is paramount that you are in class barring an unforeseen emergency.

More information regarding attendance can be found at https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

E-Learning: All students are expected to check E-Learning (http://lss.at.ufl.edu) on a regular basis. Please ensure that you have access to this service. Additional handouts, readings and supplemental material will be housed on E-Learning, this includes your grades.

Academic Integrity: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

In the fall of 1995, the UF student body enacted a new honor code and voluntarily committed itself to the highest standards of honesty and integrity. (See UF Rule 6C1-4.017)
Students are required to be honest in all of their university class work. Faculty members have a duty to promote ethical behavior and avoid practices and environments that foster cheating. Faculty should encourage students to bring incidents of dishonesty to their attention. A faculty member, in certain circumstances, can resolve an academic dishonesty matter without a student disciplinary hearing. The procedures and guidelines are available from the Student Guide.

Student Pledge: On my honor, I have neither given nor received unauthorized aid in doing this assignment.

(Source: 2017-2018 Undergraduate Catalog)

**Software Use:** All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

**Campus Helping Resources:** Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources. Both the Counseling Center and Student Mental Health Services provide confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health Services is located on the second floor of the Student Health Care Center in the Infirmary.

- **University Counseling Center**, 301 Peabody Hall, 392-1575, [www.counsel.ufl.edu](http://www.counsel.ufl.edu)
- **Career Resource Center**, CR-100 JWRU, 392-1602, [www.crc.ufl.edu](http://www.crc.ufl.edu/)
- **Student Mental Health Services**, Rm. 245 Student Health Care Center, 392-1171, [www.shcc.ufl.edu/smhs/](http://www.shcc.ufl.edu/smhs/)
  - Alcohol and Substance Abuse Program (ASAP)
  - Center for Sexual Assault / Abuse Recovery & Education (CARE)
  - Eating Disorders Program
  - Employee Assistance Program
  - Suicide Prevention Program

**Students with Disabilities:** "Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation."

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. 0001 Reid Hall, 392-8565, [www.dso.ufl.edu/drc](http://www.dso.ufl.edu/drc)
### Tentative Course Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic &amp; Speaker</th>
<th>Reading (Before Class)</th>
<th>Assignment Due</th>
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<tbody>
<tr>
<td><strong>Unit 1: The Foundation</strong></td>
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| Week 1. 8/22 | Intro & Course Dynamics  
What is Challenge 2050? | None | Reflection. 8/24 at 11:59 |
| Week 2. 8/27,29 | Systems Thinking +  
Self-Awareness & Leadership  
Speaker: Val McKee, M.S. - KAI | Emmott Part 1 | Reflection. 8/31 at 11:59 |
| Week 3. 9/5 | Values Clarification, Leadership  
+ Complex Problems | Emmott Part 1 | Reflection. 9/7 at 11:59 |
| **Unit 2: The People** | | | |
| Week 4. 9/10,12 | 7.14 – 9.725 Billion: Population Dynamics  
Speaker TBD | Assigned Reading | Reflection. 9/14 at 11:59 |
| Week 5. 9/17,19 | Picturing Our World: Poverty & Development  
Speaker TBD | Assigned Readings | Reflection. 9/21 at 11:59 |
| Week 6. 9/24,26 | Understanding Obesity & Nutrition  
Speaker TBD  
Groups Assigned | Assigned Readings | Reflection. 9/28 at 11:59  
Identifying Leaders Due |
| Week 7. 10/1,3 | Economics of the Crisis  
Speaker TBD | Assigned Readings | Reflection. 10/5 at 11:59 |
| **Unit 3: The Resources: Energy, Agriculture, Space, & Beyond** | | | |
| Week 8. 10/8,10 | The Adventure of the Agronomist – A Cross-Cutting Perspective  
Speaker TBD | Assigned Readings | Reflection. 10/12 at 11:59 |
| Week 9. 10/15,17 | Green Revolution & GMOs: What Have We Done?  
Speaker TBD | Assigned Readings | Reflection. 10/19 at 11:59 |
| Week 10. 10/22,24 | The Energy Conundrum  
Speaker TBD | Assigned Readings | Reflection. 10/26 at 11:59 |
| Week 11. 10/29,31 | Global Health & Sanitation: What Else is Going On?  
Speaker TBD | Assigned Readings | Reflection. 11/2 at 11:59 |
| Week 12. 11/5,7 | Water, Water, Everywhere?  
Water Resources  
Speaker TBD | Assigned Readings | Reflection. 11/9 at 11:59 |
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<td>11/14</td>
<td>11/19</td>
<td>11/26,28</td>
<td>12/3,5</td>
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<tr>
<td>The Shift in Climate: Where are We Headed? Speaker TBD</td>
<td>Policy Development: Linking Intent To Impact Speaker TBD</td>
<td>Group Presentations</td>
<td>Evaluations &amp; Reflections</td>
</tr>
<tr>
<td>Assigned Readings</td>
<td>Assigned Readings</td>
<td>None</td>
<td>None</td>
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