PLS 4950 Plant Science Capstone

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Instructor Contact

Dr. Kimberly Moore
3205 College Ave. Davie FL 33314
954-577-6328
954-475-4125 (fax)
Email: klock@ufl.edu; Skype: kimberly.moore27

Email/phone messages: students can expect a response within 24 hrs. M-F and within 72 hrs. on weekends. My preferred way of communicating with students is using email (klock@ufl.edu). I check my UF email frequently every day and on the weekends. If I plan to be out of the office or out of email communication, I will email the class and post an announcement on the class website.

Course (catalog) Description

Students will identify a problem or topic in plant sciences and develop a poster presentation about this problem or topic. This course will discuss the following topics: how to develop a hypothesis, how to complete a reliable literature review, the importance of peer review, and how to present results and findings.

Course Overview

This course is designed to help students identify a problem or topic in plant sciences and to develop a poster presentation about this problem or topic. At the end of the semester, students will present a poster on a topic, issue or problem in plant science. Presentations will be in Gainesville.

Required Reading

Course Prerequisites
PLS3004C and PLS4941. One year of employment experience in plant sciences may be substituted for PLS4941 with instructor permission.

Acceptable Course Participation
This is an online course. The learning management system Canvas will be used and students are expected to become familiar with using it. The week begins on Monday and ends on Sunday. Students are expected to login to the course website at least once a week (see schedule) to complete the assignments and/or watch the narrated lecture (see course goals and assignments & assessment). The course includes reflection papers, discussion sessions, independent work, peer assessment, and a final poster presentation.

All course materials will be available via the Canvas course website. Students are expected to participate in online discussions, unless they have an excused absence. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu.

Course Goals and Assignments:
By the end of this course the student should be able to:
1. Define the term capstone
2. Evaluate what makes a good hypothesis
3. Distinguish between reliable and un-reliable references/sources
4. Create a reliable reference list
5. Discuss the alternative solutions to proposed problem(s)
6. Discuss the value of using poster templates
7. Critically and positively assess fellow classmates’ work
8. Present and discuss their findings in a poster format
Assessment

See schedule for dates. The week begins on Monday and ends on Sunday. All discussions and/or assignments need to be completed by the end of each week (Sunday 5 pm, Eastern time zone).

The accepted format for all assignments is MS Office files. If there is a malfunction with the class site or computer malfunctions occur, assignments may be emailed or sent via fax. It is the obligation of the student to inform me of such malfunctions immediately.

Discussion: (150 points)

Discussion posts must be completed by Sunday at 5 pm ET. Discussion posts should be well written and address the issue or question being discussed. All posts should be made within the week assigned. Discussions will be graded on the quality and timeliness of the response (see discussion grading rubric attachment under syllabus tab). Each student is expected to comment on three fellow class mates’ posts. Discussion posts will be accepted up to four days after the due date but will be marked down five points. Each is worth 25 points. You will have 4 discussions:

1. Introduce yourself
2. Expectations of the capstone course
3. Hypothesis development
4. Reliable sources of information
5. Your project
6. Value of templates

Project topic: (25 pts)

Each student needs to submit and have an approved topic for their poster presentation. This is worth 25 points.

Literature review: (100 pts)

Students are expected to write a thorough literature review on their topic. Each literature review will be graded on the reliability of sources. The review should start with a general introduction to the problem with references. What has been completed or is known about this topic, issue, or problem? What is your hypothesis and why do you feel this is valid? What are potential solutions to this problem? The same rubric for the final project will be used to evaluate each literature review.

Progress report and meeting with instructor: (25 pts)

Each student needs to meet with the instructor to discuss their project at the mid-semester. Students will schedule either a phone conference or online conference with the instructor to discuss progress on their project.

Peer Assessment: (50 pts)
Each student will assess the work of one of their peers. Students are to use the rubric provided by the instructor to evaluate their peer’s literature review as well as the final poster. You are expected to give suggestions for improvement (not just to say it looks OK). Students will be graded on the validity of their assessment.

1. Literature Review
2. Final Poster

**Self-reflection (25 pts)**
Each student will write a one to two page reflection answering the following questions — *How did your other courses prepare you for the capstone experience? What experiences or knowledge have you used from other courses to prepare your final project? What has been the most challenging part of this course for you?*

**Project Guidelines: (100 pts)**

*Skill areas that are being evaluated:* quality of presentation (organization and overall form); validity (accuracy, was the project on topic and were arguments supported); impact (did the project open up new possibilities, was the problem solved); and sophistication of knowledge (complexity or maturity of knowledge; did the student avoid naïve misconceptions). The attached rubric will be used to determine a satisfactory grade for completion of this project. Each student project will be evaluated by a committee of three faculty from the Agronomy, Plant Pathology, and Environmental Horticulture departments.

1. Define or identify a problem, issue or topic in plant science that is related to teaching, research, extension or your practical work experience.
2. Describe the problem and reasons for its importance. Use literature (and data) to support your argument.
3. Propose and support potential and/or probable solutions to this problem/issue.
4. Self-reflection: Describe how you will use the knowledge gained from this project/experience in the future.
5. Present your findings as a poster (**Mandatory presentation in Gainesville on date TBA**)  

**Learning Community Overview**

1. Consider yourself a member of a community. A community is a group of individuals who work together to support a common goal or interest.
2. Treat all contributions made by other members with respect.
4. Ask for help when you need it.
5. Assist others when possible. Share questions and ideas with the rest of the class.
6. Have patience with the technology.
7. Respect diverse opinions and viewpoints of each member in the community.
8. Contribute regularly.
9. All postings shared within this community should reflect acceptable content standards. You are expected to use discretion and if asked you will be expected to demonstrate how your content supports the focus of this community. 

10. Student participation on a weekly basis is an essential aspect of the online course process. All students are expected to do the work assigned, notify the instructor when emergencies arise, and make up missing assignments no later than four days after they are due.

11. If at any time, you feel that any of these ground rules have been violated by a member of our community, you are encouraged to bring your concern directly and immediately to the instructor.

Modified 4-25-2010 from www.learningwithoutwalls.com

Netiquette & Discussion Expectations

Netiquette (short for "network etiquette" or "Internet etiquette") is a set of social conventions that facilitate interaction over networks, ranging from Usenet and mailing lists to blogs and forums (as defined by Wikipedia).

Adapted from Rules of Netiquette (http://www.albion.com/netiquette/corerules.html)

1. Remember the human. Never forget that the person reading your mail or posting is, indeed, a person, with feelings that can be hurt.
2. Adhere to the same standards of behavior online that you follow in real life.
3. Know where you are in cyberspace.
4. Respect other people’s time and bandwidth
5. Make yourself look good online. Check grammar and spelling before you post. Know what you’re talking about and make sense. Do not post flame-bait.
7. Help keep flame wars under control. Flame is a personal attack. It is possible to disagree without attacking the person. Use emoticons and acronyms to convey emotion to avoid misunderstanding.
8. Respect other people’s privacy.
9. Don’t abuse your power.
10. Be forgiving of other people’s mistakes.

TOTAL POSSIBLE POINTS & GRADES = 500 pts

For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

A (470-500 points)
Absences and Make-Up Work
Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Academic Honesty
As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php.
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. The Counseling & Wellness Center provides 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.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
  Training Programs
  Community Provider Database

- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/

Services for Students with Disabilities
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. 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

0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/
December 11, 2014

Student Complaints
Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. See http://distance.ufl.edu/student-complaints for more details.

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<th>Week of</th>
<th>Topic and Assignments</th>
<th>Due Date – 5 pm Eastern Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module 1</strong></td>
<td></td>
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<tr>
<td><strong>Jan 5</strong></td>
<td><strong>Introduction</strong></td>
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<td></td>
<td>Lecture 1 – Introduction to the course and expectations</td>
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<td></td>
<td>Read Chapter 1 - Science</td>
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<td></td>
<td>Discussion - Introductions</td>
<td>Jan 11</td>
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<td></td>
<td>Discussion – Capstone expectations</td>
<td>Jan 11</td>
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<tr>
<td><strong>Jan 12</strong></td>
<td><strong>Identify a Problem</strong></td>
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<td></td>
<td>Lecture 2 – Problems in research, teaching and extension</td>
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<td></td>
<td>Read Chapter 2 - Observation</td>
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<td></td>
<td>Discussion – What makes a good hypothesis?</td>
<td>Jan 18</td>
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<td>Topic for poster</td>
<td>Jan 18</td>
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<td><strong>Jan 19</strong></td>
<td><strong>Online class meeting (Mandatory)</strong></td>
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<tr>
<td></td>
<td>Read Chapter 3 - Proposing Explanations</td>
<td>TBA</td>
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<tr>
<td><strong>Jan 26</strong></td>
<td><strong>Literature Review</strong></td>
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<td></td>
<td>Lecture 3 – How to perform a literature review</td>
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<td>Lecture 3a – Using the UF library</td>
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<td>Read Chapter 3 – Proposing Explanations</td>
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<tr>
<td>Week of</td>
<td>Topic and Assignments</td>
<td>Due Date – 5 pm Eastern Time</td>
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<td></td>
<td>Discussion – Reliable vs. un-reliable sources</td>
<td>Feb 1</td>
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<td></td>
<td>Start working on literature review for project</td>
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<td>Feb 2</td>
<td><strong>Defend the importance</strong></td>
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<td>Lecture 4 – Answer the question so what?</td>
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<td>Lecture 4a – Importance of Peer Review</td>
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<td>Read Chapter 4 – Testing Explanations</td>
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<td>Literature Review due to your classmate</td>
<td>Feb 8</td>
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<tr>
<td>Module 2</td>
<td><strong>[Top]</strong></td>
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<tr>
<td>Feb 9</td>
<td><strong>Peer review</strong></td>
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<td></td>
<td>Complete peer review of your classmates literature review</td>
<td>Feb 15</td>
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<tr>
<td>Feb 16</td>
<td><strong>Solutions and Outcomes</strong></td>
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<tr>
<td></td>
<td>Lecture 5 – Solution and outcomes</td>
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<td>Read Chapter 5 – Establishing Causal Links</td>
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<td>Discussion – Share your topic and outcomes</td>
<td>Feb 22</td>
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<td>Feb 23</td>
<td><strong>One-on-one meetings with Dr. Moore (phone conference)</strong></td>
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<td>Progress report</td>
<td>Mar 1</td>
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<td>Literature Review</td>
<td>Mar 1</td>
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<td>Mar 2</td>
<td><strong>Spring Break</strong></td>
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<tr>
<td>Week of</td>
<td>Topic and Assignments</td>
<td>Due Date – 5 pm Eastern Time</td>
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<td>Mar 9</td>
<td><em>Presentations Do’s and Don’ts</em></td>
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<td>Lecture 6 – What not to do</td>
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<td>Read Chapter 6 - Fallacies</td>
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<td>Discussion – Value of templates</td>
<td>Mar 15</td>
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<tr>
<td>Mar 16</td>
<td><em>Self-reflection</em></td>
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<td></td>
<td>Self-reflection question</td>
<td>Mar 22</td>
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<tr>
<td>Mar 23</td>
<td><em>Project work</em></td>
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<td><strong>Module 3</strong></td>
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<tr>
<td>Mar 30</td>
<td><em>Peer review poster</em></td>
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<td>Peer review class mates project</td>
<td>Apr 5</td>
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<tr>
<td>Apr 6</td>
<td><em>Revisions of poster</em></td>
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<td></td>
<td>Posters due to Dr Moore for printing</td>
<td>Apr 12</td>
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<tr>
<td>Apr 13</td>
<td><em>Present project to class - Gainesville</em></td>
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<td>Meet in Gainesville for Poster presentations</td>
<td>Apr 17</td>
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<tr>
<td>Apr 20</td>
<td><em>Wrap up and discussion about course</em></td>
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<tr>
<td>Criteria</td>
<td>Excellent (5)</td>
<td>Very good (4)</td>
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<td>-------------------------------------------------------------------------------</td>
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<tr>
<td>Quality of Presentation</td>
<td>Strong evidence of preparation, organization, and enthusiasm for topic. Writing is focused, concise, and has a clear fluent progression of ideas. Literature is cited correctly.</td>
<td>There is evidence of preparation, organization, and enthusiasm for the topic. The student clearly links events and relationships and there is no break in progression. There is a sense of completeness. There are a few minor flaws in coherence but the student uses effective vocabulary and sentence structure. Most of the literature is cited correctly.</td>
</tr>
<tr>
<td>Validity</td>
<td>The student accurately and clearly describes the problem and provides strong reasons for its importance. Specific literature and data are given in support. The student provides specific, relevant details to support ideas.</td>
<td>The student describes the problem and provides reasons for its importance. An adequate amount of information is given in support. The student provides details to support ideas.</td>
</tr>
<tr>
<td>Impact</td>
<td>The student provided effective and interesting solutions to the proposed problem that were novel as well as well supported and defended.</td>
<td>The student provided plausible solutions to the proposed problem that were supported and defended.</td>
</tr>
<tr>
<td>Sophistication of Knowledge</td>
<td>The student was insightful with cutting edge solutions to the problem.</td>
<td>The student was proficient with adequate solutions.</td>
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</tbody>
</table>