

| COURSE NAME: AG 315 | | | |
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| FACULTY NAME: Rita Abi Ghanem | | DATE SUBMITTED: 3-23-2023 | |
| COURSE COMPONENT | PREVIOUS VERSION DESCRIPTION | CULTURALLY REponsive CHANGES DESCRIPTION(S) | CULTURES ADDRESSED THROUGH THESE REVISIONS |
| Syllabus | This is a science-based class of plant nutrition and fertilizers. The focus is the determination of deficiency symptoms, management, and application methods to improve plant nutrition and optimize yield production with lecture on Monday and laboratory on Wednesday. | In order to make this class more culturally responsive I added the following points: 1-Added activities and case studies to allow students to bring their own experiences 2- Brought multicultural speakers who are leaders in their career as role models 3- Added more field trips 4- Allowed the final projects to be done in farms that are located outside USA. | All cultures will be addressed |
| Course Units | 4.0 units | | |
| Reading Assigned/Textbook | 1. Adopted Text: <ul style="list-style-type: none"> Havlin J.L., Tisdale S.L., Nelson W.L., and Beaton J.D., Soil Fertility and Fertilizers: An Introduction to Nutrient Management, 8th Edition. Pearson, 2013. 2. Recommended text: | No changes | All cultures will be addressed |

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| | <ul style="list-style-type: none"> • International Plant Nutrition Institute, Soil fertility Manual, 23rd Edition. The Fertilizer Institute, 2019. • Western Fertilizer Handbook, Tenth Edition. Western Plant Health Association (WPHA), 2022 <p>3. The instructor will also provide other reading resources.</p> | | |
| Instructional Methods | Lectures on Monday, Laboratory on Wednesday | Added more class activities and class discussions and encouraged students to help others whose first language is not English | |
| Assignments | Keep an up-to-date laboratory notebook and work on developing a nutrient management program with a crop of choice in CA. | Keep an up-to-date laboratory notebook and work on developing a nutrient management program with a crop of choice in any location. | All cultures will be addressed |
| Activities | Laboratories hands-on experiments and some field trips | More field trips and class activities related to case studies and the topic discussed each week. | All cultures will be addressed |

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| Instructional Methods | <p>This is an in-person class, lectures on Mondays using PPT where students are encouraged to participate and ask questions at any time. There is also a laboratory with hands-on experiments on Wednesdays.</p> | <p>Students are encouraged to discuss about personal experiences related to the class objectives and share photos or stories in addition to class discussion of case studies. I also added explanation on correlating some topics to environmental and climate impacts.</p> | <p>All cultures will be addressed</p> |
| Classroom Environment | <p>In- person class with lectures PPT and laboratory sessions</p> | <p>This is a small group class and I made it clear to the students to speak freely and be respectful to each other's opinions and that I care about them and their future. They are welcome to ask questions and bring ideas related to the objectives of the class to help them in their career since many wanted to be certified crop advisors (CCA) helping growers with nutrient management for a better yield.</p> | <p>All cultures will be addressed</p> |
| Grading Policies | <ol style="list-style-type: none"> Weekly in class quizzes to cover lab and lecture materials: 10 points each x 10 quizzes (total 100 points) | <p>No changes</p> | |

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| | <ol style="list-style-type: none"> 2. Mid-Term and final exams: 100 points each (200 points total) 3. Acknowledgment of attendance and being on time: 50 points 4. Lab notebook: 50 points 5. Final project: 100 points (70 pts written 30 pts presentation) | | |
| Learning Goals | The learning goals is to identify the role of plant nutrients and their deficiency symptoms, and to develop nutrient management plans for successful agricultural production. | Students will be able to develop critical thinking given several case studies and class discussion and having a final project of their choice open to any location. | All cultures will be addressed |

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| ***Things to keep at the forefront of your mind while modifying curriculum to be culturally responsive and humanizing: |
| Seek-out, recognize, and address bias within the curriculum components. |
| Seek insights from students to assist in the designing of curriculum and accuracy of portrayals. |
| Bring real-world and community issues into the curriculum and seek ideas from students regarding actions. |
| Highlight power dynamics, privilege, and historical oppression. |
| Utilize multiple perspectives from different cultural groups. |