

**PLANT HEALTH 7000
(Phytonematology)
SPRING 2021**

Instructor: Tristan T. Watson, Assistant Professor of Nematology
Department of Plant Pathology and Crop Physiology
Office: A415 Life Sciences Building Annex
Telephone: 225-578-7145
Email: TWatson@agcenter.lsu.edu

***Due to complications of the COVID-19 pandemic, this course will be taught by remote teaching and learning in Spring 2021.**

Office Hours: Virtual office hours by appointment on Tuesday or Thursday.

Schedule:

Lecture: Tuesdays and Thursdays, 10:30 AM – 11:50 AM
Live via Zoom

Lab: Thursdays, 1:30 PM – 5:20 PM
Live via Zoom

Objectives:

This course will provide students with a broad understanding of plant-parasitic nematode biology, ecology, pathogenesis, and management. Students will understand the importance of nematodes associated with economically important plants worldwide. Lab activities will include demonstrating key methodology used in nematology research. Students will gain experience presenting scientific concepts through a series of student presentations (featured nematode, research article, and research proposal).

Grading:

The final course grade will be comprised of the following:

Three Semester Exams*	20% each
Lab Worksheets	10%
Featured Nematode Presentation	10%
Research Article Presentation	10%
<u>Research Proposal Presentation</u>	<u>10%</u>

* Semester exams will be Moodle based, during a lecture period and students are expected to be on video throughout.

LSU requires that a plus/minus grading system be used. This course will therefore be graded on a curve such that the corrected cumulative grade (rounded to the nearest whole number) after curve correction will be as follows:

A+	=	99-100
A	=	93-98
A-	=	91-92
B+	=	89-90
B	=	83-88
B-	=	81-92
C+	=	79-80
C	=	73-78
C-	=	71-72
D+	=	70
D	=	66-69
D-	=	65
F	=	<65

Schedule – Plant Health 7000 – Phytonematology - Spring 2021

<u>Day</u>	<u>Date</u>	<u>Lecture Topic</u>	<u>Lab Topic</u>
Tuesday	01/05/21	Course Overview / Introduction to Nematodes	
Thursday	01/07/21	Morphology & Anatomy 1	No Lab
Tuesday	01/12/21	Morphology & Anatomy 2	
Thursday	01/14/21	Taxonomy 1 – Phylum Nematoda	Extraction Techniques
Tuesday	01/19/21	Taxonomy 2 – Order Tylenchida	
Thursday	01/21/21	Taxonomy 3 – Order Tylenchida	Nematode Diversity
Tuesday	01/26/21	Evolution of Parasitism	
Thursday	01/28/21	Course Review	Featured Nematode Presentations
Tuesday	02/02/21	Exam #1	
Thursday	02/04/21	Population Dynamics	Featured Nematode Presentations
Tuesday	02/09/21	Disease Complexes	
Thursday	02/11/21	Nematicides	Root-Knot Nematode
Tuesday	02/16/21	Mardi Gras	
Thursday	02/18/21	Plant Host Resistance	Reniform Nematode

Tuesday	02/23/21	Biocontrol of Nematodes 1	
Thursday	02/25/21	Biocontrol of Nematodes 2	Nematicides
Tuesday	03/02/21	Abiotic Factors	
Thursday	03/04/21	Entomopathogenic Nematodes	Article Presentations
Tuesday	03/09/21	Nematode Diagnostics	
Thursday	03/11/21	LSU AgCenter Nematode Advisory Program	Article Presentations
Tuesday	03/16/21	Course Review	
Thursday	03/18/21	Exam #2	Extension Nematology
Tuesday	03/23/21	Spring Break	
Thursday	03/25/21	Spring Break	No Lab
Tuesday	03/30/21	Role of Free-Living Nematodes	
Thursday	04/01/21	Root-Knot Nematode	Molecular Techniques
Tuesday	04/06/21	Cyst Nematode	
Thursday	04/08/21	Reniform Nematode	Host Resistance
Tuesday	04/13/21	Nematode Management in Row Crops	
Thursday	04/15/21	Nematode Management in Vegetable Crops	Cover Crops
Tuesday	04/20/21	Nematode Management in Perennial Crops	
Thursday	04/22/21	Course Review	Proposal Presentations
Tuesday	04/27/21	Exam #3	

Accessibility:

The University is committed to making reasonable efforts to assist individuals with disabilities in their efforts to avail themselves of services and programs offered by the University. To this end, Louisiana State University will provide reasonable accommodations for persons with documented qualifying disabilities. If you have a disability and feel you need accommodations in this course, you must email a letter to me from Disability Services in 115 Johnston Hall, indicating the existence of a disability and the suggested accommodations. Lectures and labs will be saved as Zoom videos with PowerPoint presentations and accompanying transcripts of the audio.

General Statement of Academic Integrity:

Louisiana State University adopted the Commitment to Community in 1995 to set forth guidelines for student behavior both inside and outside of the classroom. The Commitment to Community charges students to maintain high standards of academic and personal integrity. All students are

expected to read and be familiar with the LSU Code of Student Conduct and Commitment to Community, found online at lsu.edu/saa. It is your responsibility as a student at LSU to know and understand the academic standards for our community. Students who are suspected of violating the Code of Conduct will be referred to the office of Student Advocacy & Accountability. For undergraduate students, the outcome will range from failing the assignment to failing the class along with disciplinary probation. For graduate students, a first violation leads to deferred suspension for at least two semesters and a failing grade in the course.

Plagiarism and Citation Method:

As a student at LSU, it is your responsibility to refrain from plagiarizing the academic property of another and to utilize appropriate citation method for all coursework. Ignorance of the citation method is not an excuse for academic misconduct. Remember there is a difference between paraphrasing and quoting and how to properly cite each respectively. One tool available to assist you in correct citations is the “References” function in Microsoft Word. This program automatically formats the information you input according to the citation method you select for the document. This program also has the ability to generate a reference or works cited page for your document. The version of Microsoft Word with the “References” function is available in most University computer labs. A demonstration of how to use this tool is available online at www.lsu.edu/saa.

Group Work and Unauthorized Assistance:

All work must be completed without assistance unless explicit permission for group or partner work is given by the faculty member. This is critical so that the professor can assess your performance on each assignment. If a group/partner project is assigned, the student may still have individual work to complete. Read the syllabus and assignment directions carefully. You might have a project with group work and a follow up report that is independently written. When in doubt, e-mail the faculty member or ask during a class session. Seeking clarification is your responsibility as a student. Assuming group/partner work is okay without permission constitutes a violation of the LSU Code of Student Conduct.

Center for Academic Success:

The Center for Academic Success offers free resources to help students increase their academic performance. Content specific-support includes in-person and online tutoring, supplemental instruction (twice weekly, peer-led study sessions), and study groups (informal study sessions facilitated by a trained tutor). For help developing learning strategies, managing time, and increasing test performance, one-on-one academic coaching and strategy workshops help students plan their path toward academic success in all their classes. The Testing Center provides convenient test taking options for students. Visit the CAS website at lsu.edu/cas for more information.