Date Submitted: 03/27/18 3:47 pm

Viewing: AFLSPH ~~PTSCPH~~ : Agricultural, Food and Life Sciences, ~~Plant Science,~~ Doctor of Philosophy

Last approved: 08/15/14 4:44 pm

Last edit: 10/17/18 5:34 pm

Changes proposed by: jorgense

Catalog Pages Using this Program

Plant Science (PTSC)

Submitter: **5-3179** User ID: crsleaf1 Phone:

Program Status **Active**

Academic Level Graduate

Type of proposal **Major/Field of Study**

Select a reason for this modification

Reconfiguring an Existing Degree—(LON 11)

Are you adding a concentration?

Yes ~~No~~

Concentration(s):

In Workflow

1. **AFLS Dean Initial**
2. **GRAD Dean Initial**
3. **Provost Initial**
4. **Director of Program Assessment and Review**
5. **Registrar Initial**
6. **Institutional Research**
7. **PLPA Chair**
8. **AFLD Chair**
9. **PLPA Curriculum Committee**
10. **AFLD Curriculum Committee**
11. **AFLS Faculty**
12. **AFLS Dean**
13. **Global Campus**
14. **Provost Review**
15. **University Course and Program Committee**
16. **Graduate Committee**
17. **Faculty Senate**
18. Provost Final
19. Provost's Office--Documentation sent to System Office
20. Higher Learning Commission
21. Board of Trustees
22. ADHE Final
23. Provost's Office--Notification of Approval

24. Registrar Final
25. Catalog Editor Final

Approval Path

1. 01/30/18 2:46 pm Lona Robertson (ljrobert): Approved for AFLS Dean Initial
2. 01/30/18 3:32 pm Pat Koski (pkoski): Approved for GRAD Dean Initial
3. 02/02/18 9:43 am Terry Martin (tmartin): Approved for Provost Initial
4. 02/06/18 10:45 am Alice Griffin (agriffin): Rollback to Initiator
5. 03/07/18 8:51 am Lona Robertson (ljrobert): Approved for AFLS Dean Initial
6. 03/07/18 8:56 am Pat Koski (pkoski): Approved for GRAD Dean Initial
7. 03/07/18 9:44 am Terry Martin (tmartin): Approved for Provost Initial
8. 03/22/18 3:20 pm Alice Griffin (agriffin): Rollback to Initiator
9. 03/27/18 3:54 pm Lona Robertson (ljrobert): Approved for AFLS Dean Initial

10. 03/27/18 4:05 pm Pat Koski (pkoski): Approved for GRAD Dean Initial
11. 03/28/18 7:51 am Terry Martin (tmartin): Approved for Provost Initial
12. 05/07/18 2:08 pm Alice Griffin (agriffin): Approved for Director of Program Assessment and Review
13. 06/26/18 2:42 pm Karen Turner (kjvestal): Approved for Registrar Initial
14. 06/26/18 2:57 pm Gary Gunderman (ggunderm): Approved for Institutional Research
15. 06/28/18 11:00 am Terry Kirkpatrick (kirkpatr): Approved for PLPA Chair
16. 07/01/18 7:39 pm Lona Robertson (ljrobert): Approved for AFLD Chair
17. 09/20/18 2:12 pm Jefferson Miller (jdmiller): Approved for PLPA Curriculum Committee
18. 09/20/18 3:29 pm Jefferson Miller

(jdmiller): Approved for AFLD Curriculum Committee
19. 09/20/18 4:11 pm Douglas Karcher (karcher): Approved for AFLS Faculty
20. 09/20/18 4:28 pm Lona Robertson (ljrobert): Approved for AFLS Dean
21. 09/21/18 10:57 am Miran Kang (kang): Approved for Global Campus
22. 10/08/18 8:01 am Terry Martin (tmartin): Approved for Provost Review
23. 10/29/18 9:49 am Alice Griffin (agriffin): Approved for University Course and Program Committee
24. 11/16/18 9:06 am Pat Koski (pkoski): Approved for Graduate Committee

History

1. Aug 15, 2014 by Leepfrog Administrator (clhelp)

Action	Code	Title
Add new	**AFLS-AECT**	**Agricultural Education, Communications and Technology**

Action	Code	Title
Add new	**AFLS-ENTO**	**Entomology**
Change Existing	**AFLS-HORT**	**Horticulture**
Change Existing	**AFLS-PTPA**	**Plant Pathology**

Are you adding a track? No

Are you adding a focused study? No

Effective Catalog Year Fall 2019

College/School Code Bumpers College of Agricultural, Food, and Life Sciences(AFLS)

Department Code **Department of Agri Food and Life Sciences Dean (AFLD)** ~~Department of Plant Pathology(PLPA)~~

Program Code **AFLSPH** ~~PTSCPH~~

Degree Doctor of Philosophy

CIP Code

01.1101 ~~26.0305~~ - Plant **Sciences, General.** ~~Pathology/Phytopathology.~~

Program Title

Agricultural, Food and Life Sciences, ~~Plant Science,~~ Doctor of Philosophy

Program Delivery Method

On Campus

Is this program interdisciplinary?

No

Does this proposal impact any courses from another College/School?

No

What are the total hours needed to complete the program? **42**

Program Requirements and Description

Requirements

Degree Conferred: Ph.D. (AFLSPH)

Areas of Concentration: Agricultural Education, Communications and Technology, Entomology, Horticulture, and Plant Pathology.

Program Description: The AFLSPH program prepares students to enter the broad field of agriculture, food and life sciences and to work in interdisciplinary teams related to food crop production, environmental management, pest management and education and communications in agricultural disciplines.

Prerequisites to Degree Program: A Master of Science (M.S.) degree is desirable. A student ~~International students must submit TOEFL scores~~ **with an exceptional record in academics and/or research may be approved** ~~their application. Approval by the Plant Science Steering Committee is also necessary~~ **for admission to the AFLSPH** ~~acceptance into the~~ **program with a Bachelor of Science (B.S.) if the Graduate Student Concentration Admissions Committee** ~~study leading to the Doctor~~ **of the desired concentration deems them qualified and approval is granted by the AFLSPH Steering Committee.** ~~**Philosophy degree.**~~ **A** ~~In addition to the requirements for admission to the Graduate School, the~~ student **admitted to the University** ~~must submit to the Chair~~ of **Arkansas, pursuing an M.S.** ~~Studies a statement of interest, three letters of recommendation, which evaluate the potential of the student to pursue advanced graduate studies, and scores from the Graduate Record Examinations.~~ **and in good academic standing may apply to be admitted to the AFLSPH program and forgo completing the M.S. degree if so approved by the AFLSPH Steering Committee and the AFLSPH Graduate Concentration Admissions Committee. A minimum grade point average of 3.00 (on a 4.00 scale) on previous college-level course work is required.**

~~**International students must submit TOEFL scores with their application. Approval by the Plant Science Steering Committee is also necessary for acceptance into the program of study leading to the Doctor of Philosophy degree.**~~**Admissions Requirements for Entry:** ~~Entry:~~ **To be considered for admission, a student must submit a letter of intent, along with the application for admission indicating the desired degree concentration, areas of interest and career goals. Official transcripts of all previous college-level course work must be submitted. Three letters of recommendation are required. These letters should address the character and academic capability of the applicant. Applications will first be reviewed by the AFLS Steering Committee which will assign the student to the appropriate Graduate Student Concentration Admissions Committee for review. The Concentration Admissions Committee will make the final determination of admittance into the AFLSPH program and the concentration.**

~~The requirements for admission to the plant science Ph.D.program include the following:completion of an M.S.degree in a relevant biological science with a cumulative grade-point average of 3.00 or better (of 4.00), submission of scores from the verbal, quantitative, and written Graduate Record Examinations (GRE), three letters of recommendation, and official transcripts from all institutions attended.~~Requirements for Doctor of Philosophy Degree: **The AFLSPH program requires** ~~Students are expected to maintain~~ **a total** ~~cumulative grade-point average~~ **of 72 credit hours after a Bachelor of Science (B.S.)** ~~2.85~~ **or Bachelor of Arts (B.A.) degree or 42 hours after a Master of Science (M.S.) or Master of Arts (M.S.) degree.** ~~**better (3.00 to graduate) as consistent with the policy of the Graduate School.**~~

General course requirements for each degree candidate are arranged on an individual basis by the Faculty Advisor, the Graduate Advisory Committee and the candidate in accordance with guidelines of their concentration. Alternate courses may be selected at the discretion of the committee.

All students must complete 6 hours of elective course hours and 2 hours of seminar. One seminar must be a research proposal presentation and the other must be an exit seminar presenting the dissertation research results. All students ~~Each candidate~~ must **complete 18 hours of** ~~present a~~ doctoral dissertation **hours.** ~~based on original research.~~ **Students entering the AFLSPH program with only a B.S. or B.A. must also complete an additional 30 hours (to reach the 72 hour post B.S./B.A. requirement). Students must satisfactorily pass written and oral candidacy examinations covering their discipline and supporting areas. These examinations** ~~A final examination on the doctoral dissertation and cognate areas~~ **must be completed** ~~passed~~ **at least one year** ~~two weeks~~ **before completion** ~~the time~~ **of the AFLSPH** ~~expected~~ **degree program.** ~~**conferral.**~~ **Each candidate must complete a doctoral dissertation on an important research topic in the concentration field. The specific problem** ~~Course requirements are established by the student's major adviser~~ and **subject of the dissertation is determined by** the **Faculty Adviser, the student and the Graduate Advisory Committee.** ~~graduate advisory committee.~~ **A dissertation title** ~~The student~~ must **be submitted to** ~~pass a candidacy examination at least two semesters before~~ the **Dean** ~~expected conferral date~~ of the **Graduate School at least one year before the dissertation defense.** ~~degree.~~ **Provisional approval of the dissertation must be given by all members of the Graduate Advisory Committee prior to the dissertation defense. Students must pass the oral defense and examination of the dissertation given by the Graduate Advisory Committee. A student cannot be approved for conferral of the AFLSPH degree until after completion of all coursework, written and oral candidacy exams, the defense passed and dissertation accepted by the Graduate School and an application for the degree has been filed with the Registrar's Office and the fee paid.**

In addition to the general requirements for the AFLSPH listed above, students in the Agricultural Education, Communications and Technology concentration must complete 3 professional seminar credits related to research and teaching, 9 graduate credits related to research and/or data analysis (qualitative and quantitative research methods), 3 credit hours in graduate-level courses related to theory appropriate to the student's discipline, 6 graduate-level elective credits as appropriate to the discipline, and 6 hours of externship credit to be performed outside of the AECT department.

In addition to the general requirements for the AFLSPH listed above, students in the Entomology concentration must complete two semesters of ENTO 6071 (or alternatives approved by the graduate committee), ENTO 5024 (Insect Diversity and Taxonomy), ENTO 5053 (Insect Ecology), ENTO 5153 (Insect Pest Management), ENTO 6113 (Insect Physiology and Molecular Biology) and AGST 5014 (Experimental Design) or a similar graduate-level statistics course.

In addition to the general requirements for the AFLSPH listed above, students in the Horticulture concentration must complete 9 graduate-level credits of courses in Horticulture (HORT).

In addition to the general requirements for the AFLSPH listed above, students in the Plant Pathology concentration must complete PLPA 5303 (Advanced Plant Pathology, Genetics and Physiology), PLPA 5313 (Advanced Plant Pathology, Ecology and Epidemiology), PLPA 5404 (Diseases of Economic Crops), and PLPA 5001 (Seminar). Students must complete one course from PLPA 5103 (Plant Disease Control) or PLPA 5603 (Plant Pathogenic Fungi), or PLPA 6203 (Plant Virology), or PLPA 6303 (Plant Nematology), or PLPA 6503 (Plant Bacteriology).

~~A final examination on the doctoral dissertation and cognate areas must be passed at least two weeks before the time of expected degree conferral.Students are expected to maintain a cumulative grade-point average of~~

~~2.85 or better (3.00 to graduate) as consistent with the policy of the Graduate School.~~

Are Similar Programs available in the area?

No

Estimated Student Demand for Program **19**

Scheduled Program Review Date **2021**

Program Goals and Objectives

Program Goals and Objectives
The agricultural, food, and life sciences are undergoing a significant shift in their use of technology. This shift has led to the need for graduates prepared to enter career fields in which they work collaboratively with professionals in a wider variety of disciplines than ever before. In an effort to best prepare graduates to enter the interdisciplinary agricultural, food, and life sciences workforce, an interdisciplinary Doctor of Philosophy (Ph.D.) degree in Agricultural, Food, and Life Sciences is proposed (AFLSPH). This college-level Ph.D. program, encompassing four concentration areas, will enable faculty from across the Dale Bumpers College of Agricultural, Food, and Life Sciences (Bumpers College) to best prepare students in a wide array of natural and social sciences within agriculture, food and life sciences. Specific concentrations in Agricultural Education, Communications, and Technology (AECT), Entomology, Horticulture, and Plant Pathology allow students to specialize within a specific discipline, while developing a tailored degree program with electives and committee members from other disciplines. Because students will have a discipline-specific concentration embedded within an interdisciplinary degree program, graduates will be well prepared to enter their concentration-related career field, and at the same time, they will be competitive within a cross-disciplinary job market. Furthermore, the structure of the degree program will give the program the flexibility to change as the needs of employers and students change.

Learning Outcomes

Learning Outcomes
1) Students shall have a broad understanding of the important areas of research being conducted in Agricultural, Food and Life Sciences. **2) Students will have an in depth knowledge base in their chosen concentration.** **3) Students shall understand how to formulate testable hypotheses and to design research to test the hypotheses.** **4) Students will understand how to conduct appropriate statistical analyses of research data.** **5) Students shall have the written and oral communication skills to allow them to effectively communicate research results to the scientific community, industry and the general public.**

Description and justification of the request

Description of specific change	Justification for this change
Reconfiguring PTSCPH with concentrations in Plant Pathology and Horticulture to an AFLSPH with concentrations in Plant Pathology, Horticulture, Entomology and Agricultural Education, Communications and Technology.	This college-level Ph.D. program, encompassing four concentration areas, will enable faculty from across the Dale Bumpers College of Agricultural, Food, and Life Sciences (Bumpers College) to best prepare students in a wide array of natural and social sciences within agriculture, food and life sciences. Specific concentrations in Agricultural Education, Communications, and Technology (AECT), Entomology, Horticulture, and Plant Pathology allow students to specialize within a specific discipline, while developing a tailored degree program with electives and committee members from other disciplines. Because students will have a discipline-specific concentration embedded within an interdisciplinary degree program, graduates will be well prepared to enter their concentration-related career field, and at the same time, they will be competitive within a cross-disciplinary job market. Furthermore, the structure of the degree program will give the program the flexibility to change as the needs of employers and students change. Additionally, the proposed new Ph.D. program (AFLSPH) will increase the administrative efficiency of our college's graduate offerings.

Upload attachments

AFLSPH - Reconfig - Ltr of Notification.docx
ENTOPH - Deletion - Ltr of Notification.docx
PTSCPH - Deletion - Ltr of Notification.docx

Reviewer Comments

Lona Robertson (ljrobert) (01/30/18 2:41 pm): This change will not require any new resources.
Alice Griffin (agriffin) (02/06/18 10:45 am): Rollback: Please review catalog copy and edit as appropriate.
Alice Griffin (agriffin) (03/15/18 8:28 am): Revised current org chart to clarify the PhD in Plant Science has two concentrations in the LON 11. Renamed LONs to match naming convention for BOT documents.
Alice Griffin (agriffin) (03/22/18 3:20 pm): Rollback: PLPA has requested additional changes to the curriculum. Contact John Rupe if you have questions.
Pat Koski (pkoski) (03/27/18 4:05 pm): I change PLSC to PTSC, as Political Science is not part of the requested changes.
Alice Griffin (agriffin) (03/28/18 11:09 am): Edited the program requirements for PLPA concentration to match the curriculum in the LON with approval from dept.
Alice Griffin (agriffin) (04/12/18 10:30 am): Changed concentration program code from PLPA to

PTPA to match currently existing program code.

Alice Griffin (agriffin) (10/11/18 2:35 pm): Updated approval dates in LONs.

Alice Griffin (agriffin) (10/17/18 5:34 pm): The combined deletion LON had to be removed because they are individual degree programs. Copied information into separate LON 5 documents for the ENTOPH and PTSCPH.

Key: 196