

Date Submitted: 12/04/22 1:26 pm

## Viewing: **CEMBPH : Cell and Molecular Biology, Doctor of Philosophy**

Last approved: 04/05/17 11:29 am

Last edit: 12/06/22 8:29 am

Changes proposed by: drhoads

Catalog Pages Using  
this Program

[Cell and Molecular Biology\\_\(CEMB\)](#)

Submitter: User ID: [drhoads calison](#) Phone:  
[575-7396](#) ~~575-4401~~

Program Status Active

Academic Level Graduate

Type of proposal Major/Field of Study

Select a reason for this modification

Making Minor Changes to an Existing Certificate, Degree or Program (including 15 or fewer hours, admission/graduation requirements, Focused Studies or Tracks)

Are you adding a concentration?

No

Are you adding or modifying a track?

No

Are you adding or modifying a focused study?

No

Effective Catalog Year Fall 2023

College/School Code

Graduate School and International Education (GRAD)

Department Code

Department of Graduate Dean (GRSD)

### In Workflow

1. GRAD Dean Initial
2. GRAD Dean Initial
3. Director of Curriculum Review and Program Assessment
4. Registrar Initial
5. Institutional Research
6. GRSD Chair
7. AFLS Dean
8. ARSC Dean
9. EDUC Dean
10. ENGR Dean
11. GRAD Dean
12. Global Campus
13. Provost Review
14. Graduate Council
15. Faculty Senate
16. Provost Final
17. Registrar Final
18. Catalog Editor Final

### Approval Path

1. 12/04/22 1:09 pm  
Christa Hestekin (chesteki): Rollback to Initiator
2. 12/05/22 11:21 am  
Christa Hestekin (chesteki): Approved for GRAD Dean Initial
3. 12/05/22 11:23 am  
Christa Hestekin (chesteki):

Program Code	CEMBPH
Degree	Doctor of Philosophy
CIP Code	

Approved for GRAD  
Dean Initial

4. 12/05/22 5:21 pm  
Alice Griffin  
(agriffin): Approved  
for Director of  
Curriculum Review  
and Program  
Assessment

5. 12/06/22 8:30 am  
Gina Daugherty  
(gdaugher):  
Approved for  
Registrar Initial

6. 12/06/22 12:13 pm  
Doug Miles  
(dmiles): Approved  
for Institutional  
Research

7. 12/06/22 12:53 pm  
Christa Hestekin  
(chesteki):  
Approved for GRSD  
Chair

8. 12/06/22 12:56 pm  
Lona Robertson  
(ljrobert): Approved  
for AFLS Dean

9. 12/06/22 1:21 pm  
Jeannie Hulen  
(jhulen): Approved  
for ARSC Dean

10. 12/06/22 1:24 pm  
Matthew Ganio  
(msganio):  
Approved for EDUC  
Dean

11. 12/06/22 3:27 pm  
Kevin Hall (kdhall):  
Approved for ENGR  
Dean

- 12. 12/06/22 3:36 pm  
Christa Hestekin  
(chesteki):  
Approved for GRAD  
Dean
- 13. 12/07/22 8:42 am  
Suzanne Kenner  
(skenner): Approved  
for Global Campus
- 14. 12/07/22 11:27 am  
Jim Gigantino  
(jgiganti): Approved  
for Provost Review
- 15. 12/19/22 11:27 am  
Christa Hestekin  
(chesteki):  
Approved for  
Graduate Council

## History

- 1. Mar 4, 2015 by  
Charlie Alison  
(calison)
- 2. Oct 9, 2015 by Pat  
Koski (pkoski)
- 3. Apr 5, 2017 by  
Charlie Alison  
(calison)

26.0406 - Cell/Cellular and Molecular Biology.

### Program Title

Cell and Molecular Biology, Doctor of Philosophy

### Program Delivery

#### Method

On Campus

Is this program interdisciplinary?

Yes

College(s)/School(s)

**College/School Name**

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

Fulbright College of Arts and Sciences (ARSC)

College of Education and Health Professions (EDUC)

College of Engineering (ENGR)

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

No

What are the total 72  
hours needed to  
complete the  
program?

## Program Requirements and Description

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### Requirements

**Admission to Degree Program:** All applicants must have a B.A. or B.S. in a basic or applied science. Applicants must submit transcripts, letters of recommendation, and the CEMB Applicant Profile. Applicants may also wish to present Graduate Record Examination scores for the Verbal and Quantitative tests, and the GRE writing instrument, to enhance their credentials. GRE scores are required to compete for special graduate school fellowships. For consideration for admission, a student must secure a sponsoring faculty member. Individual faculty may require additional materials (GRE, writing examples, etc.). The sponsoring faculty member will submit probable thesis subjects to the Program Committee prior to acceptance of the student. Once an applicant has been approved by the Program Committee, the program submits the application for admission to the Graduate School. Admitted and sponsored students will be responsible for the Graduate School's application fee unless paid by the sponsoring faculty member. When deemed appropriate by the Director and Program Advisory Committee, the Cell and Molecular Biology program will allow a qualified applicant to be admitted to complete research rotations through up to three designated research laboratories during his/her first semester enrolled in the Cell and Molecular Biology graduate program. Admission for research rotations is contingent up: 1) Stipend support has been guaranteed for the student during the rotation semester; and 2) the Cell and Molecular Biology faculty designated for the rotation have agreed to host the student during this period. After the rotation period, the student must obtain a faculty research sponsor.

**Requirements for the Doctor of Philosophy Degree:** Candidates for the Ph.D. must complete 18 hours of dissertation research. Students wishing to bypass the M.S. for a Ph.D. must complete the same 24 hours of course work in Cell and Molecular Biology-approved course work as for the M.S. degree, plus a minimum of 18 hours of dissertation research. In addition, all candidates who are considered full-time must enroll every fall and spring semester in a Cell and Molecular Biology designated seminar course. Graduate advisory and dissertation committees will consist of at least four program faculty representing at least two different

departments. With the approval of the student's Graduate Advisory Committee, up to 6 hours of alternative graduate courses may be used to satisfy the 24 hours of course work. Any student who receives a grade of "D" or "F" in any graduate-level course will be subject to dismissal following review by the Program Advisory Committee. Any student receiving more than two grades of "C" in courses of two or more credit hours is no longer eligible for the Ph.D., but may elect to complete an M.S. degree in the program

Candidates for the Ph.D. who do not meet the requirement for proficiency in spoken English at the time of admission must demonstrate proficiency in spoken English through a university-accepted examination prior to their candidacy exam. English proficiency courses are available at the University of Arkansas to help in this effort. Meeting this language requirement will not only prepare candidates for communication in oral examinations, research groups, national meetings, and interviews, but will also (in conjunction with the written language evaluation) enable students to serve as teaching assistants, providing an alternative mechanism for support in the event that other support is unavailable.

All Ph.D. students must complete the Candidacy Examination. The Candidacy Examination for the Ph.D. will consist of the writing of an original research proposal using the guidelines for a federally funded post-doctoral fellowship (e.g., NIH, NSF, USDA) and an oral examination over the proposal, related subjects, and general knowledge. The written and oral portions of the candidacy examination must be completed within the Ph.D. candidate's first 29 months in this program.

Students in the Ph.D. track will, in collaboration with their Graduate Advisory Committee, select a topic and format for their research proposal within the two years in the program. The proposal topic is to be within the field of Cell and Molecular Biology but on a subject distinct from the student's Ph.D. research. The written proposal is submitted to the student's Graduate Advisory Committee for evaluation and approval or rejection. Students may submit the proposal more than once. Upon completion of an approved proposal the candidate must then pass an oral examination by the student's Graduate Advisory Committee covering the proposal, related subjects as determined by the examining committee, and general knowledge relevant to research in Cell and Molecular Biology.

Only upon satisfactory completion of the proposal and oral examination, as judged by the student's Graduate Advisory Committee, does a student become a candidate for the Ph.D. Students who fail to complete the candidacy examination in the allotted time will be dropped from the Ph.D. program but may choose to become candidates for the M.S. The Ph.D. is granted not only for fulfillment of technical requirements but also for development and possession of critical and creative thought abilities in the areas of Cell and Molecular Biology. Evidence of these abilities is given through the completion of a dissertation. The student's Graduate Dissertation Committee will evaluate the dissertation and conduct an oral Final Examination of the candidate over the dissertation and any other subject matter deemed appropriate by the committee. Administration of the final oral defense will follow the Graduate School guidelines outlined in the Graduate Catalog. Just prior to the Final Examination, the Ph.D. candidate will present a public seminar announced to all CEMB faculty and students.

Students should also be aware of Graduate School requirements with regard to [doctoral degrees](#).

Are Similar Programs available in the area?

No

Estimated Student Demand for Program      NA

Scheduled Program 2024-2024 ~~NA~~

Review Date

Program Goals and

Objectives

**Program Goals and Objectives**a. Provide graduate students a solid educational foundation in Cell Biology and Molecular Biology.b. Train students how to perform and conduct scientific research in Cell Biology and Molecular Biology ~~NA~~

Learning Outcomes

**Learning Outcomes**1. A comprehensive, exit examination graded by faculty in the program.2. Completion of a specific research project and production of a thesis (M.S.) or dissertation (Ph.D.) which is graded by faculty in the program. ~~NA~~

Description and justification of the request

Description of specific change	Justification for this change
<p>Admission to Degree Program: All applicants must have a B.A. or B.S. in a basic or applied science. Applicants must submit transcripts, letters of recommendation, and the CEMB Applicant Profile. Applicants may also wish to present Graduate Record Examination scores for the Verbal and Quantitative tests, and the GRE writing instrument, to enhance their credentials. GRE scores are required to compete for special graduate school fellowships. For consideration for admission, a student must secure a sponsoring faculty member. Individual faculty may require additional materials (GRE, writing examples, etc.). The sponsoring faculty member will submit probable thesis subjects to the Program Committee prior to acceptance of the student. Once an applicant has been approved by the Program Committee, the program submits the application for admission to the Graduate School. Admitted and sponsored students will be responsible for the Graduate School's application fee unless paid by the sponsoring faculty member. When deemed appropriate by the Director and Program Advisory Committee, the Cell and Molecular</p>	<p>Changing the admission process to make the GRE optional. We are not aware of any specific form we need to complete. We checked all the grad.uark.edu forms we could find.</p>

Description of specific change	Justification for this change
<p>Biology program will allow a qualified applicant to be admitted to complete research rotations through up to three designated research laboratories during his/her first semester enrolled in the Cell and Molecular Biology graduate program. Admission for research rotations is contingent up: 1) Stipend support has been guaranteed for the student during the rotation semester; and 2) the Cell and Molecular Biology faculty designated for the rotation have agreed to host the student during this period. After the rotation period, the student must obtain a faculty research sponsor.</p>	

Upload attachments

[CEMB catalog update.docx](#)

Reviewer Comments

**Christa Hestekin (chesteki) (12/04/22 1:09 pm):** Rollback: It should be 72 hours from BS to PhD.

**Alice Griffin (agriffin) (12/05/22 5:13 pm):** ATTENTION REGISTRAR: Please remove the Undergraduate Council from the approval workflow.

**Alice Griffin (agriffin) (12/05/22 5:15 pm):** Updated the schedule program review date.

**Alice Griffin (agriffin) (12/05/22 5:18 pm):** Inserted program goals and student learning outcomes from the 2022 assessment report. GSIE is encouraged to review for accuracy.

**Alice Griffin (agriffin) (12/05/22 5:20 pm):** Due to changes to the admission policy, this minor program change will require campus approval.

**Gina Daugherty (gdaugher) (12/06/22 8:29 am):** Undergraduate Council removed from workflow.

Key: 294