## Biochemistry and Molecular Biology Minor

**5. New Undergraduate Program Proposal 2018-2019 (degree, major, minor, licensure, or endorsement)**

### General Information

Please complete a separate form for each request. Note that new degree or major programs or program changes of 50% or more require approval by the Ohio Department of Higher Education (ODHE). There are 3 forms that are required: 1) ODHE initial inquiry form (this should be submitted to the Provost’s Office after review by the College Dean); 2) ODHE proposal form (this should be submitted after the approval of the Undergraduate Curriculum Committee); and 3) the WSU new program financial impact form. The required forms can be found online at: [http://policy.wright.edu/policy/4210-undergraduate-ohio-department-higher-education-odhe-program-approval-forms](http://policy.wright.edu/policy/4210-undergraduate-ohio-department-higher-education-odhe-program-approval-forms).

Concentrations are tied to a major. New concentrations can be proposed by using the Undergraduate Program Modification form to list the new concentration and requirements within a current major.

### INSTRUCTIONS

Select "Program" from the radio box below, then complete the information requested for type of program, approving department, and program name.

<table>
<thead>
<tr>
<th>Program Type (Select &quot;Program&quot;) *</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shared Core</td>
</tr>
</tbody>
</table>

#### Type of Request **

- New degree designation (A.S., B.A., B.F.A., etc.) and major
- New major within an existing degree
- **New minor**
- New licensure program or endorsement

New programs and degrees have additional ODHE requirements which are available on the University Policy website: [http://policy.wright.edu](http://policy.wright.edu).

**Educator Preparation Programs** (additional ODHE requirements will be identified by the College of Education and Human Services)

### Approval Route

For the following programs, please select "University Programs" from the list of departments and programs below: Honors, Air Force Studies, and Army Studies.

<table>
<thead>
<tr>
<th>Department or Program (for approval process)*</th>
<th>Biochemistry and Molecular Biology</th>
</tr>
</thead>
</table>
**Title:** Major, Degree or Area of Study Credential

Examples: English, BA or Reading License

<table>
<thead>
<tr>
<th>Title*</th>
<th>Biochemistry and Molecular Biology Minor</th>
</tr>
</thead>
</table>

Launch the proposal.

Approve the proposal using the decision button.

**TIPS FOR NEW USERS**

Turn the help text on by clicking on the following icon 🌐.

All fields with an asterisk (*) are required fields. If left blank, the request will not be launched and cannot be acted upon.

Supporting documents and additional information may be attached using the button located at the top of this form.

<table>
<thead>
<tr>
<th>College*</th>
<th>Science and Mathematics, College of</th>
</tr>
</thead>
</table>

**Catalog Display**

Select the primary College or Department. **Do not select a program.** This information will determine where a program displays in the catalog. A program may display in only one location, under either a College or Department.

<table>
<thead>
<tr>
<th>College or Department (for catalog display)*</th>
<th>Biochemistry and Molecular Biology</th>
</tr>
</thead>
</table>

| Published Program Length (in Years)* | 1 |

| Collaboration with another department, college, program or institution? | Yes | No |

If yes, please list

<table>
<thead>
<tr>
<th>Requested Effective Term*</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
</table>

| Year* | 2018 |

<table>
<thead>
<tr>
<th>Where Offered? (check all that apply)*</th>
<th>Dayton Campus</th>
<th>Lake Campus</th>
<th>Off-Campus in Ohio</th>
<th>Off-Campus outside Ohio</th>
<th>Off-Campus outside U.S.</th>
</tr>
</thead>
</table>
If this program is offered Off-Campus, specify the location(s)

Is 50% or more of the program offered Off-Campus?*  
☐ Yes  ☐ No

If program will be offered off-campus, how will services be available to students?

Mode of Delivery*  
☑ Face-to-face  
☐ Fully Online  
☐ Mostly Online (less than 50% offered face-to-face)

Program Description

The information entered below will appear in the catalog as submitted.

Please include information using the following four headings (in order). Click on "format" in the edit box below and select "Heading 2" for each heading listed. Select the "normal" format for the body of text under each heading.

- **Program Description**
- **Admission Requirements**
- **Program Learning Outcomes** (see examples below)
- **For more information visit:** (include the department website)

**Program Learning Outcomes**

Examples:

History graduates should be able to:

- write proficiently,
- understand the methodology that historians use, and
- analyze primary sources and secondary works in order to arrive at a coherent and well-organized conclusion.

Biomedical Engineering graduates should have the ability to:

- apply knowledge of mathematics, science and engineering design and conduct experiments and to analyze and interpret data
- design a system, component, or process to meet desired needs within realistic constraints
- function on multi-disciplinary teams
Program Description

The Biochemistry and Molecular Biology minor is available for students who would like to gain a better understanding of biochemistry or molecular biology content or skills. Students in a wide range of CoSM majors may benefit by supplementing their knowledge and skill with a stronger background in biochemistry and molecular biology, particularly those pursuing professional degrees post-graduation. The minor is flexible and allows students to select from a subset of courses beyond the required departmental core courses permitting students to align the minor more appropriately with their major. The minor may be fulfilled by completing the following requirements.

Admission Requirements

To be admitted into the minor you must have already declared a major and have completed BMB 4210 OR BMB 4230 with a C or better.

Program Learning Outcomes

Graduates from this minor should be able to:

Utilize foundational concepts in Biochemistry and Molecular Biology such as the role of energy in metabolic systems and the knowledge of molecular structure and function to examine analytical, quantitative, and conceptual problems within the field.

For more information visit: https://science-math.wright.edu/biochemistry-and-molecular-biology

Program Requirements:

Use the following template when creating program requirements. Each of the following headings is called a "core" in the template. The information entered will appear in the catalog as submitted.

Wright State Core Requirements
Required courses
Elective courses
Other requirements (if applicable)
Total: # Hours (REQUIRED)

Undergraduate programs must be 120 credit hours. A minor is made up of at least 12 credit hours. For additional information, please refer to the policies for Academic Standards and Curriculum at http://policy.wright.edu.

Non-Departmental Requirements

3 credits from the following:

BIO 2110 Principles of Molecular and Classical Genetics
BIO 2120 Cell Biology
Departmental Core

7 credits from the following:

- BMB 4210 Biochemistry and Molecular Biology I
- BMB 4230 Biochemistry and Molecular Biology II
- BMB 4000 Biochemistry and Molecular Biology Seminar

Departmental Electives

At least 2 courses from the following totaling at least 5 credits with a maximum of 3 credits from BMB 4880 and BMB 4990 combined.

- BMB 4010 Selected Topics in Biochemistry and Molecular Biology
- BMB 4880 Independent Reading in Biochemistry and Molecular Biology
- BMB 4990 Undergraduate Research
- Other approved BMB 4000 level electives

Additional requirements

Course grades must be C or better to count for graduation credit

Total credit hours

at least 15 credit hours are required for the minor

Do you want students to be able to select this major or minor in WINGS Express?

Yes ☑ No ☐

A Graduation Planning Strategy (GPS) is required for all undergraduate degree programs. Department chairs: Use the space below to paste the GPS proposal form url (web link from the GPS proposal form).

GPS url

N/A
Faculty/Program Staffing

Name Chad Campbell

Discipline Biochemistry and Molecular Biology

Title Instructor

Describe the credentialing requirements for faculty teaching in the program (degree requirements, special certifications of licenses, experience, etc.)

Ph.D. in Biochemistry or Molecular Biology or equivalent science or education degree

Additional information, if needed

Resources and Facilities

Describe additional resources

None.

All of these courses are taught as a part of the Major.

FOR NEW DEGREES OR MAJORS ONLY:

Note that new degrees and majors require approval by the Ohio Department of Higher Education (ODHE).
An Initial Inquiry form should be submitted to the Provost after college curriculum committee approval and the ODHE New Degree/Major form should be submitted to the Provost after approval by the Undergraduate Curriculum Committee to allow adequate time for review. **Please attach both completed forms to this workflow.** Forms are available under the ‘Curriculum Development’ heading on the University Policy website: [http://policy.wright.edu](http://policy.wright.edu).

A Graduation Planning Strategy (GPS) must also be submitted with this proposal. The GPS proposal is a separate expedited process and will automatically upload into the appropriate catalog.

**Program Assessment**

Describe the policies and procedures in place to assess and evaluate the proposed program. Please include: responsible position/unit/group, description of measurements used, frequency of data collection and sharing, how the results are used to inform students as they progress through the program, and initiatives used to track student success after program completion.

**Measuring Student Success**

Describe the policies and procedures in place to measure individual student success in the proposed program. Please include: responsible position/unit/group, description of measurements used, frequency of data collection and sharing, how the results are used to inform the students as they progress through the program, and initiatives used to track student success after program completion.

**Student Success**

*Are additional faculty needed to support this program?*

- Yes
- No
If yes, provide a timeline for hiring.

Provide the number of existing faculty members available to teach in the proposed degree/major.

<table>
<thead>
<tr>
<th>Full-time</th>
<th>Less than Full-time</th>
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Provide an estimate of the number of faculty members to be added during the first two years of program operation.

<table>
<thead>
<tr>
<th>Full-time</th>
<th>Less than Full-time</th>
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**Administrative Data**

**To be completed after the Board of Trustees Approval**

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<th>Resolution Number</th>
<th>Date of Approval</th>
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**To be completed by Financial Aid**

Eligible for Title IV funding:  
- Yes  
- No

**To be completed by Budget**

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**To be completed by Registrar**

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<td>Bachelor's Degree Completion Program (B)</td>
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<td>Preparatory Coursework Undergraduate (U)</td>
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## Steps for Biochemistry and Molecular Biology Minor

<table>
<thead>
<tr>
<th>Originator</th>
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<tbody>
<tr>
<td>Participants</td>
<td>Activity</td>
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</table>
| Chad Campbell | Required for Approval: 100% required  
| 10/31/2017 10:49 AM | Date Completed: 10/31/2017 10:49 AM  
| | Changes: Yes  
| | Comments: Yes |

<table>
<thead>
<tr>
<th>Undergraduate Department or Program Curriculum Committee</th>
<th>Status: Approved</th>
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<tr>
<td>Participants</td>
<td>Activity</td>
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| Biochemistry and Molecular Biology UG  
| Department Curriculum Committee | Required for Approval: 1% required  
| Madhavi Kadakia | Date Completed: 10/31/2017 12:50 PM  
| * 10/31/2017 12:50 PM | Changes: No  
| | Comments: No  
| | Agenda: Yes |

<table>
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<th>Department Chair or Program Director</th>
<th>Status: Approved</th>
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<tbody>
<tr>
<td>Participants</td>
<td>Activity</td>
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| Department Chair or Program Director | Required for Approval: 1% required  
| Madhavi Kadakia | Date Completed: 10/31/2017 12:50 PM  
| * 10/31/2017 12:50 PM | Changes: No  
| | Comments: No  
| | Agenda: Yes |

| College Curriculum Committee | Status: Approved |
Participants

COSM Undergraduate Curriculum Committee
- Ann Farrell * 11/6/2017 5:15 PM

Required for Approval:
- 100% required
Date Completed:
- 11/6/2017 5:15 PM
Changes: Yes
Comments: No
Agenda: Yes

* Agenda Administrator

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Dean

Participants

- Dean
  - Christopher Wyatt * 11/7/2017 9:08 AM

Required for Approval:
- 1% required
Date Completed:
- 11/7/2017 9:08 AM
Changes: No
Comments: No
Agenda: Yes

* Agenda Administrator

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Undergraduate Curriculum Committee

Participants

- Undergraduate Curriculum Committee
  - Barb Dunaway *
  - Cynthia Riley *
- Additional Participants

Required for Approval:
- 100% required
Date Completed:
- 11/12/2017 9:49 PM
Changes: No
Comments: No
Agenda: Yes

* Agenda Administrator

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Undergraduate Curriculum Committee

Status: Approved
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<tr>
<td><strong>Financial Aid</strong></td>
<td>Required for Approval: 100% required</td>
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<tr>
<td>Amy Barnhart *</td>
<td>Agenda: Yes</td>
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<tr>
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<td>* Agenda Administrator</td>
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<td>Step Details</td>
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<tr>
<td>Eric Poch</td>
<td>Required for Approval: 100% required</td>
</tr>
<tr>
<td>Melinda Schneider</td>
<td>Work: <em>edit, comment</em></td>
</tr>
</tbody>
</table>
Attachments for Biochemistry and Molecular Biology Minor

_BMB Minor.pdf_ (uploaded by Chad Campbell, 11/6/2017 4:24 pm)
Signatures for Biochemistry and Molecular Biology Minor

There are no signatures required on this proposal.
Crosslistings for Biochemistry and Molecular Biology Minor

Biochemistry and Molecular Biology Minor (parent proposal)
This proposal does not have any active crosslisted proposals.
## Decision Summary for Biochemistry and Molecular Biology Minor

### University Faculty Senate

#### Status: Working

#### Step Summary

This step requires 100% approval from all participants to move forward.

#### Participants

<table>
<thead>
<tr>
<th>Faculty Senate</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>▲ Cynthia Riley *</td>
<td>Users Approved: 0</td>
</tr>
<tr>
<td></td>
<td>Users Rejected: 0</td>
</tr>
</tbody>
</table>
BMB Minor

Program Description

The Biochemistry and Molecular Biology minor is available for students who would like to gain a better understanding of biochemistry or molecular biology content or skills. Students in a wide range of CoSM majors may benefit by supplementing their knowledge and skill with a stronger background in biochemistry and molecular biology, particularly those pursuing professional degrees post-graduation. The minor is flexible and allows students to select from a subset of courses beyond the required departmental core courses permitting students to align the minor more appropriately with their major. The minor may be fulfilled by completing the following requirements.

Program Requirements

Nondepartmental requirements (3 credits)

BIO 2110: Principles of Molecular and Classical Genetics

OR

BIO 2120: Cell Biology

Departmental Core (7 credits)

BMB 4210 - Biochemistry and Molecular Biology I (3 credits)

BMB 4230 – Biochemistry and Molecular Biology II (3 credits)

BMB 4000 - BMB Seminar (1 credit)

Departmental Electives (at least 5 credits)

At least 2 courses from the following totaling at least 5 credits with a maximum of 3 credits from BMB 4880 and BMB 4990 combined

BMB 3850 – Biochemistry Lab (3 credits)

BMB 4010 – Selected Topics in BMB (Variable credits)

BMB 4880 – Independent Reading in BMB (Variable credits)

BMB 4990 – Undergraduate Research (Variable credits)

Other approved BMB 4000 level electives

Total Credits: 15*

*Course grades must be C or better to count for graduation credit