

# Biochemistry and Molecular Biology, PhD

## Academic Plans

### Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

### Biochemistry and Molecular Biology, PhD

| Course   | Title   | Hours     |
|--|---|-----------|
| <b>Academic Career</b>   |   |           |
| <b>Any Semester</b>  |   |           |
| 72 s.h. must be graduate level coursework; graduate transfer credits allowed upon approval. More information is included in the General Catalog and on department website. <sup>a, b</sup> |   |           |
| Graduate College program GPA of at least 3.00 is required. <sup>c</sup>  |   |           |
| <b>Hours</b>   |   | <b>0</b>  |
| <b>First Year</b>  |   |           |
| <b>Fall</b>  |   |           |
| BMB:5240   | Biophysics and Advanced Biochemistry                  | 3         |
| BMB:5261   | Research Techniques <sup>d</sup>                      | 4         |
| BMB:5282   | Seminar   | 1         |
| BMED:5207  | Principles of Molecular and Cellular Biology          | 3         |
| Elective course <sup>e</sup>   |   | 1         |
| <b>Hours</b>   |   | <b>12</b> |
| <b>Spring</b>  |   |           |
| BMB:5261   | Research Techniques <sup>d</sup>                      | 4         |
| BMB:5282   | Seminar   | 1         |
| MMED:6226  | Cell Cycle Control <sup>e</sup>                       | 1         |
| MMED:6227  | Cell Fate Decisions <sup>e</sup>                      | 1         |
| Elective course <sup>e</sup>   |   | 3         |
| Elective course <sup>e</sup>   |   | 1         |
| <b>Hours</b>   |   | <b>11</b> |
| <b>Second Year</b>   |   |           |
| <b>Fall</b>  |   |           |
| BMB:5282   | Seminar   | 2         |
| BMB:7292   | Research Biochemistry                                 | 4         |
| BMED:7270  | Scholarly Integrity/Responsible Conduct of Research I | 0         |
| Biophysical chemistry course <sup>e</sup>  |   | 3         |
| Molecular medicine course <sup>e</sup>   |   | 3         |
| <b>Hours</b>   |   | <b>12</b> |
| <b>Spring</b>  |   |           |
| BMB:5282   | Seminar   | 1         |
| BMB:7292   | Research Biochemistry                                 | 6         |

|  |  |              |
|--|--|--------------|
| BMED:7271                                      | Scholarly Integrity/Responsible Conduct of Research II | 0            |
| Molecular medicine course <sup>e</sup>         |  | 1 - 3        |
| Elective course <sup>e</sup>                   |  | 3            |
| Exam: Doctoral Comprehensive Exam <sup>f</sup> |  |              |
| <b>Hours</b>                                   |  | <b>11-13</b> |

#### Third Year

|                                     |                       |          |
|-------------------------------------|-----------------------|----------|
| <b>Fall</b>                         |                       |          |
| BMB:7292                            | Research Biochemistry | 6        |
| Fifth-Semester Seminar Presentation |                       |          |
| <b>Hours</b>                        |                       | <b>6</b> |

#### Spring

|              |                       |          |
|--------------|-----------------------|----------|
| BMB:7292     | Research Biochemistry | 6        |
| <b>Hours</b> |                       | <b>6</b> |

#### Fourth Year

##### Any Semester

|                                   |  |          |
|-----------------------------------|--|----------|
| Fourth-Year Workshop Presentation |  |          |
| <b>Hours</b>                      |  | <b>0</b> |

##### Fall

|              |                       |          |
|--------------|-----------------------|----------|
| BMB:7292     | Research Biochemistry | 6        |
| <b>Hours</b> |                       | <b>6</b> |

##### Spring

|              |                       |          |
|--------------|-----------------------|----------|
| BMB:7292     | Research Biochemistry | 6        |
| <b>Hours</b> |                       | <b>6</b> |

#### Fifth Year

##### Any Semester

|                    |  |          |
|--------------------|--|----------|
| Fifth-Year Retreat |  |          |
| <b>Hours</b>       |  | <b>0</b> |

##### Fall

|                    |                       |          |
|--------------------|-----------------------|----------|
| BMB:7292           | Research Biochemistry | 1        |
| Prospectus Defense |                       |          |
| <b>Hours</b>       |                       | <b>1</b> |

##### Spring

|  |                             |          |
|--|-----------------------------|----------|
| GRAD:6003                              | Doctoral Final Registration | 1        |
| Exam: Doctoral Final Exam <sup>g</sup> |                             |          |
| <b>Hours</b>                           |                             | <b>1</b> |

**Total Hours** **72-74**

a Students are also required to complete at least one semester of formal teaching experience as a TA.

b Students must complete specific requirements in the University of Iowa Graduate College after program admission. Refer to the Graduate College website and the Manual of Rules and Regulations for more information.

c Graduate College program GPA is comprised of all courses that are approved degree requirements. If a student takes more than the minimum required number of semester hours to complete the degree, but all courses taken are eligible to count toward the degree, those courses will be included in the Graduate College program GPA.

d During the first academic year, students register for BMB:5261 and rotate through three different laboratories (approximately ten weeks each) unless they have satisfied this requirement in part by previous equivalent research experience. At the end of each laboratory rotation, the student will prepare a written report and present an oral summary of the research project to the Rotation Advisory Committee.

e Work with faculty advisor to determine appropriate graduate elective coursework and sequence.

- f The comprehensive examination has two parts: a written proposal and an oral defense of the proposal. The examination must be taken before June 30 of the second year.
- g Dissertation defense.