


Preparing to Major in the Biological
Sciences

Class of 2024

University of Rochester Orientation
June 24th, 2020




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Undergraduate Program In
Biology and Medicine

UPBM



All Biology majors require the same intro courses:
plan to take Biology and Chemistry



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Majors

Bachelor of Arts (BA)

- Biology

Bachelor of Science (BS)

- Biology: General Track
- Biochemistry
- Cell & Developmental Biology
- Computational Biology
- Ecology & Evolutionary Biology
- Microbiology
- Molecular Genetics
- Neuroscience



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Minors Certificates Clusters

Minors

- Biology
- Computational Biology

Certificate

- Biotechnology

Clusters

- Biological Principles
- Understanding the Biological World



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Opportunities

- [Biology in the Galapagos Spring Study Abroad](#)
- [Summer Research in the Solomon Islands](#)
- [iGEMS \(The International Genetically Engineered Machine Competition\)](#)
- [SUBS \(Society for Undergraduate Biology Students\)](#)
- [Teaching Assistants \(TA\)](#)



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Fall Introductory Courses

Courses for Majors

- BIO 110L Principles of Biology I
- BIO 112L Perspectives in Biology I

Courses for Non-Bio Majors (Clusters)

- BIO 101 Genes Germs and Genomics
- BIO 104K Ecosystem Conservation and Human Society



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BIOL 110L: Principles of Biology I

Dr. Michael Clark/ Dr. Alexis Stein

- **ALL** Biological Science Majors
- Fulfills Pre-Med Prerequisites
- Labs and Workshops
- CHM 131 Pre or Co-requisite
- Fall and Spring
- BIO Majors Take in Fall



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BIOL 112L: Perspectives in Biology I

Dr. Xin Bi / Dr. Alexis Stein

- **All** Biological Science Majors
- Fulfills Pre-Med Prerequisites
- Labs and Workshops
- CHM 131 Pre or Co-requisite
- AP Exam ≥ 5 IB Exam ≥ 6
- More In-Depth Than BIO 110L
- Fall
- 1st Year Students Only



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AP / IB Transfer Credits

- Four (4) General College Credits
AP Exam at least a 4
IB Exam at least a 6
- Not Applicable to Biology Majors
- BIO 112 Eligibility



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BIOL 101: Genes, Germs & Genomics Dr. Cheeptip Benyajati

BIOL 104K: Ecosystems Conservation & Human Society Dr. Robert Minckley

- Non-Science Majors
- Not for Pre-Med Use
- No Labs or Workshops
- No Prerequisites
- Cluster Course
- Fall



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Typical 2 Year Schedule

First Year

Fall

1. BIO 110L or 112L
2. CHM 131 or 171/173
3. Elective or WRT 105
4. Elective

Spring

1. BIO 111L or 113L
2. CHM 132 or 172/210
3. Elective or WRT 105
4. Elective

Second Year

Fall

1. BIO 190 or 198
2. CHM 203/207
3. Elective
4. Elective

Spring

1. *BIO 250L
2. *CHM 204/208
3. *BIO 214
4. Elective

Declare Major



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Major Declaration

- Spring Semester Sophomore Year
 1. Contact UPBM Office
 2. Meet with Advisor
 3. File Declaration Form with College



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UPBM Track Coordinators



Dr. Elaine Sia, Chair
UPBM Co Director
Molecular Genetics



Dr. Cheeptip Benyajati
UPBM Co Director



Dr. Danielle Presgraves
Associate Director of
Student Affairs
BA and Minor in Biology



Dr. Jim Fry
BS Biology:
General Track



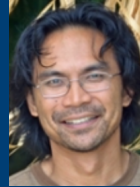
Dr. Elizabeth Grayhack
BS Biochemistry



Dr. Amanda Larracunte
BS & Minor in
Computational Biology



Dr. David Lambert
BS Cell and
Developmental Biology



Dr. Albert Uy
BS Ecology &
Evolutionary Biology



Dr. Jacques Robert
BS Microbiology
Biotechnology Certificate



Dr. Renee Miller
BS Neuroscience



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Peer Advisors

Trained undergraduates share insights on:

- Student life
- Picking courses for next semester
- Faculty connections
- Landing research opportunities
- Studying Abroad
- Preparing for Health Professions / Graduate School

Meet Our Peer Advisors:

<http://www.rochester.edu/college/ccas/peer-advisors/#bio>



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Getting Started in Research

- Networking
- Independent Research
 - When? Where?
- Supporting Professional and Research Competencies (SPARC)
- Opportunities to Present
- deKiewiet Fellowship
- Degree with Honors in Research
- UR Undergraduate Research Office



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Preparing for Health Professions Going Pre-Med

- An interest, not a major
- Simply a matter of taking courses in biology, chemistry, statistics, calculus...
- See list of pre-requisite courses for medical, dental, and vet programs:
<https://www.rochester.edu/college/health/academics/pre-req.html>
- The Greene Center for Career Education and Connections



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Contact Info

- UPBM Office Hutchison Hall, Room 487 & 488
[http://BioDeptUgOffice@ur.rochester.edu](mailto:BioDeptUgOffice@ur.rochester.edu)
(585) 275-3850
- UPBM Website:
<http://www.sas.rochester.edu/bio/undergraduate/index.html>
- Department of Biology Website:
<https://www.sas.rochester.edu/bio/>



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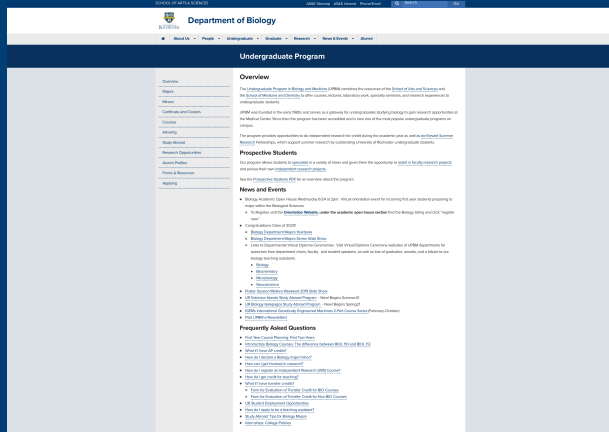
Biology Department Website



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Undergraduate Program in Biology and Medicine Website



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Administrative

Dr. Elaine Sia, PhD : Co-Director

Dr. Cheeptip Benyajati, PhD: Co-Director

Marianne Arcoraci: Program Manager

Allyson DeBoard: Course Coordinator

Marcella Sherlock: Program Office Secretary



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Questions?



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