

STUDENT NAME		SID #	
PROGRAM CHAIR		DATE	

PROGRAM REQUIREMENTS			Requested Substitution/Transfer Credits (if applicable)			Completed		
Course	Course Title	CR	College/University	Course	CR	Grade	Quarter	Year
PREREQUISITES								
	Associate's degree in Biotechnology, Molecular Sciences Technician, General Science Technician, or equivalent degree with a minimum cumulative GPA of 2.7. Math and Science transfer degree students may also be eligible.	90						
<i>Demonstrated completion of the following courses or their equivalent:</i>								
MATH 130	College Level Statistics	5						
MATH& 151/152	Calculus I & II	10						
ENGL& 101	English Composition I	5						
ENGL& 235	Technical Writing	5						
CHEM& 161/162/163	General Chemistry sequence	18						
CHEM 275	Introduction to Instrumental Analysis	6						
BIOL& 160 or 211	General Biology or Biology Majors Cellular	6						
BIOL 275	Laboratory Methods in Genomics	6						
	Science electives as listed in the AAS-T Molecular Sciences Technician science electives www.bellevuecollege.edu/programs/degrees/proftech/applied/	12						
BTS 147	Presentation Design and Delivery	3						
CMST& 250 or 280	Communication Studies	5						
	Humanities course from the AAS-DTA list	5						
	Social Science course from the AAS-DTA list	5						
TOTAL PREREQUISITES		91						
GENERAL EDUCATION REQUIREMENTS								
MBS 410	Modern Topics in Bioethics	5						
CORE PROGRAM REQUIREMENTS								
CHEM& 261	Organic Chemistry I	6						
CHEM& 262	Organic Chemistry II	6						
CHEM& 263	Organic Chemistry III	6						
CHEM 405	Biochemistry I	5						
CHEM 406	Biochemistry II	5						
DA 310	Introduction to Data Analytics	5						
MBS 320	Molecular Biosciences Seminar (<i>can be repeated up to three times for credit</i>)	2						
MBS 330	Modern Genetics	5						
MBS 340	Molecular Cell Biology	5						
MBS 350	Bioinformatics	5						
MBS 455	Advanced Methods in Molecular Biology	6						
MBS 499	Capstone Project	10						
PHYS& 114	General Physics I	6						
PHYS& 115	General Physics II	6						

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UPPER DIVISION ELECTIVES (CONTINUED)								
Choose 12 credits from the following:		12						
BIOL& 260	Microbiology (6 Cr)							
BIOL& 241	Anatomy and Physiology I (6 Cr)							
BIOL& 242	Anatomy and Physiology II (6 Cr)							
BIOL 312	Biology of Cancer (5 Cr)							
BTS 280	Project Planning, Tracking, and Reporting (5 Cr)							
MBS 430	Systems Immunology (5 Cr)							
MBS 460	Introduction to Biomedical and Biotechnology Regulations (2 Cr)							
MBS 470	Introduction to Patent Law (2 Cr)							
COURSEWORK TOTAL		95						
GRAND TOTAL		186						

Successful program graduates of the Bachelor of Applied Science in Molecular Biosciences should possess the skills necessary for careers in a variety of disciplines such as molecular biology, medicine, forensics, biochemistry, pharmacology, neuroscience, food chemistry, and environmental science.

Graduates should have a thorough understanding of the scientific disciplines underpinning molecular biosciences, as well as extensive laboratory experience using state-of-the-art equipment. They should also bring understanding of the complex regulatory environment surrounding the biosciences as well as the business skills needed to manage a project.

PROGRAM HIGHLIGHTS

This applied degree differs significantly from the traditional undergraduate science degree in several ways, including:

- Focus on developing a solid scientific background that becomes the foundation for applied laboratory skills
- Extensive laboratory work with state-of-the-art technologies to foster the development of independent laboratory skills
- Familiarity with reading, understanding, and discussing research papers in molecular biosciences through participation in the molecular biosciences seminars
- Exposure to project management and general business skills for laboratory settings
- Coursework on the regulatory and legal environments within which the molecular biosciences operate
- Preparation for immediate employment through a capstone project in a laboratory setting

ENTRY REQUIREMENTS

Individuals must have:

- Associate's degree in Biotechnology, Molecular Sciences Technician, General Science Technician, or equivalent degree with a minimum cumulative GPA of 2.7. Math and Science transfer degree students may also be eligible
- Demonstrated completion of the following courses or their equivalent:
 - College Level Math: Statistics (MATH 130)
 - Calculus I & II (MATH& 151 and 152)
 - English Composition (ENGL& 101)
 - Technical Writing (ENGL& 235)
 - General Chemistry sequence (CHEM& 161/162/163)
 - Introduction to Instrumental Analysis (CHEM 275)
 - General Biology or Biology Majors Cellular (BIOL& 160 or BIOL& 211)
 - Laboratory Methods in Genomics (BIOL 275)

- Two Science electives as listed in the AAS-T Molecular Sciences Technician science electives www.bellevuecollege.edu/programs/degrees/proftech/applied/
- Presentation Design and Delivery (BTS 147)
- Communication Studies (CMST 250 or 280)
- Humanities course from the AAS-DTA list
- Social Science course from the AAS-DTA list

DEGREE REQUIREMENTS

Completion of all required courses as shown in the worksheet. In addition to eligibility requirements, students must also achieve the following:

- Complete 90-100 quarter credits in the program with a cumulative GPA of 2.5 and minimum GPA of 2.0 for each individual core course (including transferred credits) in all mandatory program courses
- At least 45 quarter credits for the degree must be completed in residence at Bellevue College, of which 30 credits must be upper division.
- Courses may be subject to minimum grade requirements and prerequisites. Check online at www.bellevuecollege.edu/classes/all/.

APPLICATION PROCESS

To be considered for the Bachelor of Applied Science in Molecular Biosciences, prospective students must submit the following:

- Completed general Bellevue College admission form
- Nonrefundable admissions and placement fee of \$55
- Completed Bachelor of Applied Science in Molecular Biosciences application form
- Nonrefundable application fee of \$75
- Official transcripts from regionally accredited college(s), demonstrating completion of an appropriate associates degree or equivalent credits, and the prerequisite courses, with a GPA of 2.7 or higher

FOR MOST UP-TO-DATE INFORMATION, GO TO:

www.bellevuecollege.edu/programs/degrees/bachelor/mb