

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>								
BA 240	Statistical Analysis	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	General Biology	6						
BIOL& 211	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						
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						
CORE PROGRAM REQUIREMENTS		88						
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	2						
MBS 330	Modern Genetics	5						
MBS 340	Molecular Cell Biology	5						
MBS 350	Bioinformatics	5						
MBS 410	Modern Topics in Bioethics	5						
MBS 430	Systems Immunology	5						
MBS 455	Advanced Methods in Molecular Biology	6						
MBS 480	Senior Capstone Proposal	1						
MBS 481	Senior Capstone Project I	4						
MBS 482	Senior Capstone Project II	5						
PHYS& 114*	General Physics I	6						
PHYS& 115*	General Physics II	6						

*PHYS& 121 and 122 can be used for PHYS 114 and 115, respectively

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ELECTIVES								
Choose 2 courses from the following:		7-12						
BIOL& 212	Biology Majors Animal (6 Cr)							
BIOL& 213	Biology Majors Plant (6 Cr)							
BIOL& 260	Microbiology (6 Cr)							
BIOL& 241	Anatomy and Physiology I (6 Cr)							
BIOL& 242	Anatomy and Physiology II (6 Cr)							
BTS 280	Project Planning, Tracking, and Reporting (5 Cr)							
CS 210	Fundamentals of Computer Science I (5 Cr)							
CS 211	Fundamentals of Computer Science II (5 Cr)							
MBS 470	Introduction to Patent Law (2 Cr)							
PROG 110	Intro to Programming (5 Cr)							
COURSEWORK TOTAL		95-100						

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: Statistical Analysis (BA 240)
 - 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 and Biology Majors Cellular (BIOL& 160 & 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/
- 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