College of Science – Atmospheric Science, BS **Catalog Year 2024-2025**

Degree Worksheet

Mason Core Requirements			Grades	
Mason Core Foundation		**Credits**	**Earned**	**Needed**
Written Communication (lower-level)	ENGH 101 or ENGH 100	3		
Oral Communication		3		
Quantitative Reasoning	MATH 113 or 124	3		
Information Technology & Computing	CDS 130 or CS 112	3		
Mason Core Exploration				
Arts		3		
Global Contexts		3		
Literature		3		
Natural Science Overview	Satisfied by PHYS 160/161	3		
Natural Science with Lab	Satisfied by PHYS 260/261	3		
Social and Behavioral Sciences		3		
Global History	HIST 125 or 394	3		
Mason Core Integration				
Written Communication (upper-level)	ENGH 302	3		
Writing Intensive	Satisfied by CLIM 408	3		
Mason Apex	Satisfied by	3		

Major Requirements Students must complete major requirements with a minimum GPA of 2.00			Grades	
Atmospheric Sciences Core (24 credits)		**Credits**	**Earned**	**Needed**
CLIM 102	Intro. to Global Climate Change Science	4		
CLIM 111	Intro. to the Fundamentals of Atmospheric Science	3		
CLIM 112	Intro. to the Fundamentals of Atmospheric Science Lab	1		
CLIM 301	Weather Analysis and Prediction	4		
CLIM 408	Senior Research	3		
CLIM 411	Atmospheric Dynamics	3		
CLIM 429	Atmospheric Thermodynamics	3		
PHYS 475	Atmospheric Physics	3		
Chemistry (4 credits)				
CHEM 211	General Chemistry I	3		
CHEM 213	General Chemistry Laboratory I	1		
Computer Science (3-4 credits)				
Select from the following: CDS 130 or CS 112		3-4		
Mathematics (11 credits)				
MATH 113 or	Analytic Geometry and Calculus I	4		
MATH 123/124	Calculus w/Algebra/Trigonometry A &B	3/3		
MATH 114	Analytic Geometry and Calculus II	4		
MATH 213	Analytic Geometry and Calculus III	3		
Statistics (3 credits)				
STAT 250	Introductory Statistics I	3		

Physics (8 credits)				
PHYS 160	University Physics I	3		
PHYS 161	University Physics I Laboratory	1		
PHYS 260	University Physics II	3		
PHYS 261	University Physics II Laboratory	1		

Options – Must select one of the following for Degree Completion			Grades	
Meteorology (9 credits)		**Credits**	**Earned**	**Needed**
CLIM/GGS 312 or CLIM 440	Physical Climatology or Climate Dynamics	3		
CLIM/GGS 314	Severe and Extreme Weather	3		
CLIM 319	Air Pollution			
Select ONE of the following: CDS 251, CDS 301, CDS 302, CDS 303		3		

Options			Grades	
Computational Atmospheric Sciences (9 credits)		**Credits**	**Earned**	**Needed**
CLIM 470	Numerical Weather Prediction	3		
MATH 214	Elementary Differential Equations	3		
Select ONE of the following: CDS 251, CDS 301, CDS 302, CDS 303		3		

Required Electives (9 credits)-must be chosen from this list and independent of courses taken in the above options			
Select from the following: CDS 251, CDS 301, CLIM/GGS 312, CLIM/GGS 314, CLIM 319, CLIM 401, CLIM 409, CLIM 412, CLIM 438, CLIM 440, CLIM 456, CLIM 470, GEOL 420, GGS 354, MATH 214	9		

Degree Notes
A GPA of at least 2.00 is required for all core courses, with an overall GPA of at least 2.50.