

Name:

ID:

Catalog Year:

For students accepted into the Honors College for Fall 2020 or later, Honors requirements are as follows:

- Maintain an overall university GPA of 3.2 or higher;
- Complete a minimum of 24 Honors credits with a grade of **B** or higher, comprised of:
 - at least 21 credits of coursework¹
 - at least 3 APEX credits, completed under UMD faculty supervision, culminating in a public presentation of this work in an appropriate venue (e.g. Honors Convocation poster session, conference presentation, exhibition, thesis defense).

Honors Course ^{1,3}	# Credits	Semester Completed ³	Grade Earned
PHY 109H	3		
PHY 113H	4		
PHY 114H	4		
PHY 213H	3		
Honors Elective ²	3		
Honors Elective ²	3		
HON 301 or Honors Elective ²	3		
APEX: PHY 490H	3		

24

Please Note:

¹ No more than six credits may be completed by Honors Contract (courses numbered 200 or higher).

² **Honors Electives:** See course listings in COIN or visit www.umassd.edu/honors/courses/.

* Options vary by semester and are most often chosen from this list (in consultation with your advisor):

* ENL 101H, ENL 102H

* Honors offerings within University Studies 3A, 3B, 4A, 4B, & 4C

* MTH 153H, MTH 154H, MTH 213H

* With prior approval, up to three Graduate level courses (numbered 500+)

³ **Credit Progression:**

* Students **must** enroll in at least 3 Honors credits during their first semester in the Honors College.

* Thereafter, it is strongly recommended that students complete at least 3 credits per semester, or 6 credits per year, to ensure successful completion of all 24 credits within their degree timeline.

* Students must be aware of the need to plan their Honors studies in advance and they should take full advantage of the academic advising offered by the Honors College.

* It is recommended that students taking HON 301 do so in the Junior year and then begin the APEX by Fall of Senior year.



Physics Program — Recommended Honors Sequence
Curriculum Requirements (Honors courses designated by the letter H)*
Catalog Year 2016-17 (Class of 2020) and beyond

FRESHMAN YEAR															
Fall Semester				R	L	C	Spring Semester								
ENL	101H	Critical Writing & Reading I			3	0	3	ENL	102H	Critical Writing & Reading II			3	0	3
PHY	113H	Classical Physics I ¹			4	2	4	PHY	114H	Classical Physics II ^{1,5}			4	2	4
PHY	109H	Freshman Seminar ²			3	0	3	MTH	152	Calculus II ⁴			4	0	4
MTH	151	Calculus I ⁴			4	0	4			University Studies ³			3	0	3
		University Studies ³			3	0	3			Free Elective			3	0	3
							17								17
SOPHOMORE YEAR															
Fall Semester				R	L	C	Spring Semester								
PHY	115	Intro to Classical Physics ⁶			4	0	3	PHY	213H	Applied Modern Physics			4	0	3
PHY	225	Introductory Experiment. Physics I ⁷			2	3	3	MTH	280	Introduction to Scientific Program.			3	0	3
MTH	211	Analytic Geometry & Calculus III ⁴			4	0	4	PHY	234	Intermed. Mathematical Physics			3	0	3
		University Studies ³			3	0	3	PHY		Physics Elective			0	0	1
										Free Elective			3	0	3
							13								13
JUNIOR YEAR															
Fall Semester				R	L	C	Spring Semester								
PHY	313	Mechanics			3	0	3	PHY	341	Quantum Mechanics I			3	0	3
PHY	322	Electronic Devices & Circuits II			2	2	3	PHY	411	Electric & Magnetic Fields I			3	0	3
PHY		Physics Elective			3	0	3	PHY		Physics Elective			3	0	3
		University Studies ³			3	0	3	HON	301	Research Across Disciplines			3	0	3
		Science Elective ⁸			3	0	3			Science Elective ⁸			3	0	3
							15								15
SENIOR YEAR															
Fall Semester				R	L	C	Spring Semester								
PHY	342	Quantum Mechanics II			3	0	3	PHY		Physics Elective			3	0	3
PHY	421	Advanced Laboratory			0	6	3	PHY		Physics Elective (300+ level)			3	0	3
PHY		Physics Elective (300+ level)			3	0	3	PHY		Physics Elective (300+/Capstone) ⁹			3	0	3
PHY	490H	Senior Thesis ⁹			3	0	3			Free Elective			3	0	3
		Free Elective			3	0	3			Free Elective			3	0	3
							15								15

Total Credits = 120 R = Recitation & Lecture (hours) L = Laboratory (hours) C = Number of Credits

To graduate with a Bachelor of Science degree in Physics, a minimum of 120 university credits are required. Of these, 45 credits must be approved Physics courses; 12 credits in specified courses in Mathematics; 6 credits in courses in a second Science, in Mathematics, or in Engineering; and 30 credits at 300-level or higher are required. Students are required to consult with their advisor prior to registering for courses. Honors students who earn below a grade of **B** in PHY 111/113, PHY 112/114, or PHY 213 must consult with their advisor prior to the start of the next semester to develop a strategy for academic improvement.

¹PHY 111 and PHY 112 can substitute for PHY 113 and PHY 114, respectively.

²PHY 109 satisfies University Studies Cluster 1E.

³See University Studies requirements for Clusters 3 and 4.

⁴MTH 153, MTH 154, and MTH 213 can substitute for MTH 151, MTH 152 and MTH 211, respectively.

⁵PHY 114 satisfies University Studies Cluster 2A requirement.

⁶PHY 115 satisfies University Studies Cluster 2B requirement.

⁷PHY 225 satisfies University Studies Cluster 1C (Intermediate Writing) requirement.

⁸Science electives must be two courses selected from the *same* department. Courses can be selected from BIO, CHM, CIS, CEN, ECE, MNE, MTH, or Astrophysics (PHY 252 & PHY 363) and must satisfy the major requirement for the respective department. The courses must be approved by the student's faculty advisor.

⁹An approved Capstone Study, such as PHY 490 Senior Thesis or certain 400-level courses, satisfies University Studies Clusters 5A+5B.

* Not listed above is PHY 152H, "Stars, Planets, and the Search for Extraterrestrial Life," which does not count for Physics major credit.