

# Mathematics Degree Checklist

## Requirements:

1. All math majors must take every course at levels 1 and 2.
2. All math majors must take 4 courses at level 3, only including one of ODE 2 and PDE.
3. All math majors must take 4 courses at level 4, at least one of which must be 4336, 4341, 4351, or 4373.
4. Students taking both 3373 and 4373 may count one at level 3 and one at level 4.

5. All majors must take both 4160 and 4161.

This amounts to 15 courses (41 hours) in the upper division. Transferring courses at the 2000 level from junior colleges will waive the requirement for that course, but require that you take additional courses numbered  $\geq 3000$  to make a total of 15 courses at the  $\geq 3000$  level from this list.

Level	Course Number	Name	Prereqs	Offered	$\geq C$
1	Math/Honors 2413	Calculus I	2312	Fall (H), Spring, Summer	<input type="checkbox"/>
1	Math/Honors 2414	Calculus II	2413	Fall, Spring (H)	<input type="checkbox"/>
2	Math/Honors 3404	Multivariate Calculus	2414	Fall (H), Spring	<input type="checkbox"/>
2	Math 3305	Ordinary Differential Equations	2414	Fall, Spring	<input type="checkbox"/>
2	Math 3380	Algorithms in Applied Mathematics	c. 2414	Spring	<input type="checkbox"/>
2	Math 3425	Foundations of Mathematics	2414	Fall, Spring	<input type="checkbox"/>
2	Math 3315	Linear Algebra	c. 3425	Fall	<input type="checkbox"/>
3	Math 3336	Abstract Algebra I	3425	Spring	<input type="checkbox"/>
3	Math 3345	Analysis I	3425	Fall	<input type="checkbox"/>
3	Math 4350	Probability Theory	3425	Fall	<input type="checkbox"/>
3/4	Math 3373	Nonlinear ODE	3425, 3305, 3315	Spring	<input type="checkbox"/>
3/4	Math 4373	Partial Differential Equations	3425, 3305, 3404	Fall (even)	<input type="checkbox"/>
4	Math 4336	Abstract Algebra II	3336	Fall (odd)	<input type="checkbox"/>
4	Math 4341	Analysis II	3345	Spring (odd)	<input type="checkbox"/>
4	Math 4351	Applied Statistics	4350	Spring (even)	<input type="checkbox"/>
4	Math 3365	Geometric Systems	3425	Spring	<input type="checkbox"/>
4	Math 4301	Number Theory	3425	Fall (even)	<input type="checkbox"/>
4	Math 4306	Topology	3345	Spring (even)	<input type="checkbox"/>
4	Math 4321	Combinatorics	3425	Spring (odd)	<input type="checkbox"/>
4	Math 4342	Introduction to Complex Analysis	3345	Fall (odd)	<input type="checkbox"/>
4	Math 4380	Modeling and Numerical Analysis	3380, 3425	Fall (periodically)	<input type="checkbox"/>
4	Math 4399	Topics in Mathematics	3425, Perm.	Periodically	<input type="checkbox"/>
SS	Math 4160	Senior Seminar I	Final Two Sem.	Fall, Spring	<input type="checkbox"/>
SS	Math 4161	Senior Seminar II	4160	Fall, Spring	<input type="checkbox"/>