MATH Duplication and Regression

This page outlines which MATH (22M) courses result in a charge of duplication or regression. If you have any questions about the policy, please contact Prof. Oguz Durumeric (oguz-durumeric@uiowa.edu) or Cynthia Farthing (cynthia-farthing@uiowa.edu).

What is duplication?
Duplication typically occurs when a student takes a course more than once, and the course is not repeatable for credit (listed in the ISIS course description as "Repeatable: No"). **Students do not earn credit toward graduation for hours of duplication**, but any hours of duplication are used to compute grade point averages. (NOTE: A student who repeats a course with the second-grade-only option will not be charged with duplication for the course. However, only the hours from the second course count as hours toward graduation.)

A student may also be charged with duplication if the student takes two or more mathematics courses that have substantial content overlap. Depending on the situation, a student may not earn any credit for the additional courses, or the student may have the total credits of all courses reduced. Please see the Special Considerations at the end of this document for different mathematics courses that may result in duplication.

What is regression?
Mathematics courses build on one another, and many math courses have prerequisites that must be satisfied. Regression occurs when a student takes a course that is at a lower level than a course the student has previously passed.   **Students do not earn credit for hours of regression.**

When is duplication or regression assessed?
Regression is identified only at the time of final graduation analysis, and duplication may not be identified until final graduation analysis. **A student who has hours of duplication or regression may have the total credit hours reduced during the final graduation analysis, and this could delay graduation.** Therefore, it is important that students understand when duplication or regression will be charged.

For more information about duplication and regression, see the CLAS Credit Hour Policies:
http://clas.uiowa.edu/students/handbook/credit-hour-requirements-policies.

Does the course number determine duplication or regression?
The Mathematics Department offers a variety of courses for different majors that cover the same material. Therefore, a student may be charged regression even if the course number is higher than the course number of a previously completed course; duplication may be charged even if the course number is different than a previously completed course. Students should consult the table below to determine when duplication or regression will be charged.

Does the Mathematics Department check for duplication and regression?
In general, it is the student's responsibility to understand the duplication and regression policy and be aware of the effects this may have on the student's expected graduation date. However, the Mathematics Department reserves the right to check for instances of duplication and regression in its courses. The Mathematics Department may remove students from a course because of duplication or regression. Any students who are removed from a course because of duplication or regression will be informed by email before being removed.

MATH (22M) Duplication and Regression Table

4-digit Course	3-digit Course	Title	Regression charged if student previously completed	Duplication charged if student previously completed	NOTES
NOTE: **A student may take any course after MATH:2995/22M:095** *Introduction to Research Opportunities* **and will not be charged with regression.**					
MATH:0100	22M:001	Basic Algebra I	MATH:1005 or higher	MATH:0100	See Special Consideration 0.
MATH:0300	22M:003	Basic Geometry	MATH:1005 or higher	MATH:0300	See Special Consideration 0.
MATH:1000	22M:014	First Year Seminar			MATH:1000 may be repeated 2 times for credit
MATH:1005	22M:008	College Algebra	MATH:1010 MATH:1020 MATH:1240 or higher	MATH:1005	
MATH:1010	22M:005	Trigonometry	MATH:1020 MATH:1440 or higher	MATH:1010	
MATH:1020	22M:009	Elementary Functions	MATH:1380 MATH:1460 or higher	MATH:1020 MATH:1340 MATH:1440	See Special Consideration 2
MATH:1120	22M:006	Logic of Arithmetic	MATH:1130	MATH:1120	See Special Consideration 1
MATH:1130	22M:012	Theory of Arithmetic		MATH:1130	See Special Consideration 1
MATH:1140	22M:081	Geometry for Elementary Teachers		MATH:1140	
MATH:1240	22M:010	Finite Mathematics		MATH:1240	
MATH:1340	22M:013	Mathematics for Business	MATH:1380 MATH:1460 or higher	MATH:1020 MATH:1340 MATH:1440	See Special Consideration 2
MATH:1380	22M:017	Calculus and Matrix Algebra for Business	MATH:1550 or higher	MATH:1380 MATH:1460	See Special Consideration 3
MATH:1440	22M:015	Mathematics for the Biological Sciences	MATH:1380 MATH:1460 or higher	MATH:1020 MATH:1340 MATH:1440	See Special Consideration 2
MATH:1460	22M:016	Calculus for the Biological Sciences	MATH:1550 or higher	MATH:1380 MATH:1460	See Special Consideration 3
MATH:1550	22M:031	Engineering Math I	MATH:1560 MATH:1860 MATH:2560 MATH:2850 or higher	MATH:1550 MATH:1850	See Special Consideration 4
MATH:1560	22M:032	Engineering Math II	MATH:2560 MATH:3550 or higher	MATH:1560 MATH:1860 MATH:2850	See Special Considerations 5, 6, 7, 8
MATH:1850	22M:025	Calculus I	MATH:1560 MATH:1860 MATH:2560 MATH:2850 or higher	MATH:1550 MATH:1850	See Special Consideration 4
MATH:1860	22M:026	Calculus II	MATH:2560 MATH:2850 MATH:3550 or higher	MATH:1560 MATH:1860	See Special Considerations 5, 7

MATH:2150	22M:070	Foundations of Geometry	See your advisor if you have taken MATH:3600 or above.	MATH:2150	
MATH:2550	22M:033	Engineering Math III	MATH:2700	MATH:2550	See Special Consideration 10
MATH:2560	22M:034	Engineering Math IV	See your advisor if you have taken MATH:3600 or above.	MATH:2560	
MATH:2700	22M:027	Introduction to Linear Algebra	See your advisor if you have taken MATH:3600 or above.	MATH:2550	See Special Consideration 10
MATH:2850	22M:028	Calculus III	See your advisor if you have taken MATH:3600 or above.	MATH:1560 MATH:2850 MATH:3550	See Special Considerations 6, 7, 8, 9
MATH:2995	22M:095	Introduction to Research Opportunities		MATH:2995	
MATH:3550	22M:037	Engineering Math V	See your advisor if you have taken MATH:3600 or above.	MATH:2850	See Special Considerations 8, 9

Special Considerations

0. MATH:0100/22M:001 and MATH:0300/22M:003 do not earn credit toward graduation. Students should talk with their advisors before enrolling in these classes.
1. A student can earn credit for at most one of MATH:1120/22M:006 or MATH:1130/22M:012.
2. A student will be charged with duplication for taking one of MATH:1020/22M:009, MATH:1340/22M:013 or MATH:1440/22M:015 after any other course in that list. However, each course in the list could be used as a second-grade-only option for another course on the list.
3. A student will be charged with duplication for taking one of MATH:1380/22M:017 or MATH:1460/22M:016 after the other. However, each course could be used as a second-grade-only option for the other course.
4. A student will be charged with duplication for taking one of MATH:1550/22M:031 or MATH:1850/22M:025 after the other. However, each course could be used as a second-grade-only option for the other course.
5. A student taking MATH:1560/22M:032 and MATH:1860/22M:026 will only receive a total of 6 semester hours (instead of 8).
6. A student taking MATH:1560/22M:032 and MATH:2850/MATH:028 will only receive a total of 6 semester hours (instead of 8).
7. A student taking MATH:1560/22M:032, MATH:1860/22M:026, and MATH:2850/22M:028 will only receive a total of 8 semester hours (instead of 12) because the material in MATH:1860 and MATH:2850 includes all of the material in MATH:1560.
8. A student taking MATH:1560/22M:032, MATH:2850/22M:028 and MATH:3550/22M:037 will only earn a total of 7 semester hours (instead of 11) because most of the material in MATH:3550 is included in MATH:2850.
9. A student taking MATH:2850/22M:028 and MATH:3550/22M:037 will only earn a total of 5 semester hours (instead of 7) because most of the material in MATH:3550 is included in MATH:2850.
10. A student taking MATH:2700/22M:027 and MATH:2550/22M:033 will only earn a total of 4 semester hours. (If the student takes MATH:2550 first, then taking MATH:2700 will earn 2 additional hours. If the student takes MATH:2700 first, then taking MATH:2550 is considered regression, and the student earns no additional hours.