Tips for Advising Students into Mathematics Courses

As you settle back in your office chair to begin an advising session with a new freshman or transfer student, a small frisson of terror creeps up your neck as you realize that this student in front of you is actually expecting you to be able to give them good advice about what the best mathematics class for them to enroll in will be. Yes, you, the one whose insides turn to jello whenever the words "algebra" or "equation" pop up in conversation. The moment quickly passes, though, as you remember that just before the student arrived, you reviewed the handy sheet of tips sent out by the mathematics faculty for just such an occasion! Read on, dear reader. There is some basic information that you can elicit from the student and your knowledge of majors at La Verne that will make the process fairly easy. (For the brief version, skip to the end!)

You will need to know how far in mathematics students will need to go to complete their academic goals. If they are interested in a mathematics major, immediately send them for advising to a faculty member in mathematics. Other sciences? They will eventually need Calculus I, and in many cases, additional math courses. For business majors, they will eventually be taking MATH 172 Mathematical Methods for Business and Economics. For psychology, sociology, anthropology, and management, the goal is a statistics course, such as PSY 305, SOC 305, ANTH 305, or MGMT 388. (In contrast with the normal policy of a student enrolling in a mathematics class every semester until the CSQR requirement has been met, the majors requiring statistics often prefer their students to take the course later in the curriculum. The student should consult with an advisor in their major field in this case.) For virtually all other majors, MATH 170 Mathematics in Society or MATH 104 College Algebra would be appropriate choices to satisfy the CSQR General Education graduation requirement. However, the mathematics faculty strongly recommend *MATH 170 as the preferred course* for all majors not needing another specific math course (such as statistics or calculus). MATH 170 deals with the mathematics of everyday life and is more relevant for the students.

Now that you have an idea where your advisees are headed mathematically, how do you get them there? Check the prerequisites for the course they want to get into. If they have not taken the prerequisite course at La Verne, they will need to have an appropriate math placement test score. All new and transfer students who have not transferred in work meeting the CSQR requirement should have a math placement test score in their advising file. The math placement score testing worksheet at the end of this document (and in the advisor's handbook) indicates which scores allow placement into which courses. Place the student into the highest level course for which they qualify. If either MATH 170 or MATH 104 is appropriate for the particular major, emphasize the fact that MATH 170 Mathematics in Society is much more relevant for students than MATH 104 College Algebra. College Algebra seems comfortable to many students, like an old shoe, just more of the "same old, same old" from high school, so students tend to gravitate toward it, but for many students, it is a shoe that really does not fit well at all.

Finally, why do we have a math placement testing system at La Verne? Virtually every school in the country has some system for evaluating the mathematical abilities of students so as to place them into a course at the appropriate mathematical level. Nothing is more frustrating for the student (or professor) than for a student to be in a class over his or her head, not to mention the waste of four

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units worth of tuition. The goal of the placement system is to get students into the highest level class for which they have a reasonable probability of passing, if they commit to spending the time and doing the work expected in the class. In a similar fashion, students who enroll in a course with a mathematical level that is too low are prone to boredom and development of poor study habits.

A note on math overrides: There occasionally arise exceptional situations where a student may be permitted to enroll in a math course for which they do not have the appropriate prerequisite course or math placement score. This is a determination that should only be made by (1) the course instructor, (2) the Mathematics Department Chair or other mathematics faculty member, or (3) the Learning Enhancement Center Director, and only after consultation with the student and examination of SAT/ACT scores and high school or transfer transcripts. Effective with the spring semester of 2011, the registrar's office will be examining all overrides to see if they have been authorized by appropriate persons. Any students who are found to be enrolled in a mathematics class without proper prerequisites, math placement test scores, or an override from one of the authorized persons listed above, will be administratively withdrawn prior to the start of the spring semester and notified of this action.

A few frequently asked questions, and responses:

- 1. I took Intermediate Algebra at Citrus College; do I still have to take a placement test to get into College algebra? *Yes.*
- 2. I took calculus in high school; do I still have to take a placement test? Yes, unless you received a score of at least a 3 on the AP-Calculus AB or BC exam.
- 3. I was only one point below the cut-off to get into College Algebra. Isn't there some way you can let me into that class? You can re-take the math placement test one time, a minimum of three weeks after the first time, to try to improve your score. You may not retake it after the semester begins.

Quick Reference Guide

Major	Course Eventually Needed	Prerequisite	Placement Test
Math or science	MATH 201 Calculus I	MATH 105 Precalculus	В
Business	MATH 172 Math Methods for Bus/Econ	MATH 102, but MATH 104 preferred	A
PSY/SOC/ANTH/ MGMT	Statistics (305, 388)	MATH 102 Inter. Algebra	A
All others	MATH 170 preferred; MATH 104 OK	MATH 102 Inter. Algebra	A

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From the Writing and Mathematics Placement Testing Worksheet in the Advisor's Handbook:

It is recommended that students enroll in the highest level math class for which they qualify (and appropriate for their majors). Courses listed below in [brackets] *may* be taken, but are at a lower mathematical level than is recommended.

Score	Course Placement
0-9	Refer student to Learning Enhancement Center
10-15	MATH 102 - Intermediate Algebra only
16	MATH 170; ANTH 305; PSY 305; SOC 305; BUS 270; MGMT 388 [MATH 102]
17-18	MATH 104, 170; ANTH 305; PSY 305; SOC 305; BUS 270; MGMT 388 [MATH 102]
19-25	MATH 104, 105, 170, 172; ANTH 305; PSY 305; SOC 305; BUS 270; MGMT 388 [MATH 102]
	MATH 104, 105, 170, 172; ANTH 305; PSY 305; SOC 305; BUS 270; MGMT 388 [MATH 102] {Students who score 23-25 are also eligible to take College Algebra Competency Exam refer to Math Dept.}

MPLB = MATH MAPLE TEST B (computerized)

<u>Score</u>	Course Placement
0-10	Refer student to Learning Enhancement Center
11-19	MATH 105 – Precalculus
20-25	MATH 201 – Calculus I [MATH 105]
	MPTC = MATH PLACEMENT TEST C
<u>Score</u>	MPTC = MATH PLACEMENT TEST C Course Placement
Score 0-29	

^{*} Due to the wide variability in levels at which remedial mathematics courses are taught at various schools, students transferring in mathematics courses which appear to be equivalent to courses here at La Verne must still take a mathematics placement exam to determine their mathematical aptitude and the correct level of course for them to be placed into. For effective placement, students should enroll in a math course in the semester immediately following the test. In any case, a math placement test score is valid for one year only. A student may retake a placement test one time if they do not feel the first test was an accurate reflection of their abilities, but there must be a minimum of three weeks between tests for studying, and no retests will be allowed after the start of the semester.

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