



Marina Philips

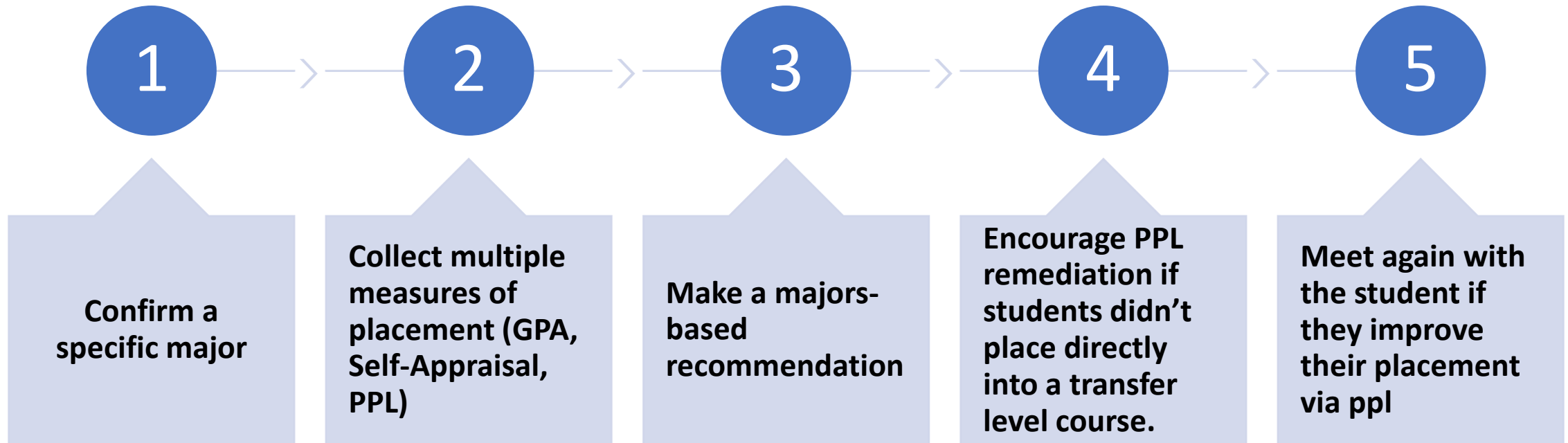
Amanda Sweeney

Advising Updates 2024

VOCAB

- **Non-Stem Path**: Majors in Humanities, Business, Social Sciences primarily; Do not have College Algebra or higher in their program
- **STEM Path**: Math, Science, and Engineering majors primarily; Do have College Algebra or higher in their program
- **Goal Placement**: Course that is program recommended, required, or at the transfer-level.
- **Default Placement**: Any course that is not the student's goal course
- **ALEKS PPL**: Placement, Prep, and Learning- a no cost to student opportunity to remediate and test out of default placements

What was the ask last year?





How did it go?

Not Great!

- Students weren't ready to make long-term commitments to a major at their intake advising appointment
- This required lots of time on the behalf of the advisor
- There are too many branches in the advising process: 6 self-appraisals?!
- The students were not confident in their self-reporting especially when it came to GPA
- The self-appraisal was time consuming to deploy
- Too many students took PPL but did not remediate nor enroll in a math course: 10% remediated and only 50% took math.
- There is no accessible field to record how students were placed, thus no way to assess the success of the placement procedure

How can we improve?

- The biggest issue that was repeatedly reported was the time on task required by the advising team for math placement.
- The best way we can improve that process is to remove steps.
- We have clustered programs into two paths: STEM and Non-STEM
- The process within each will be slightly different from each other but each resulting in less steps and less repeat visits to the advisor.

NON-STEM

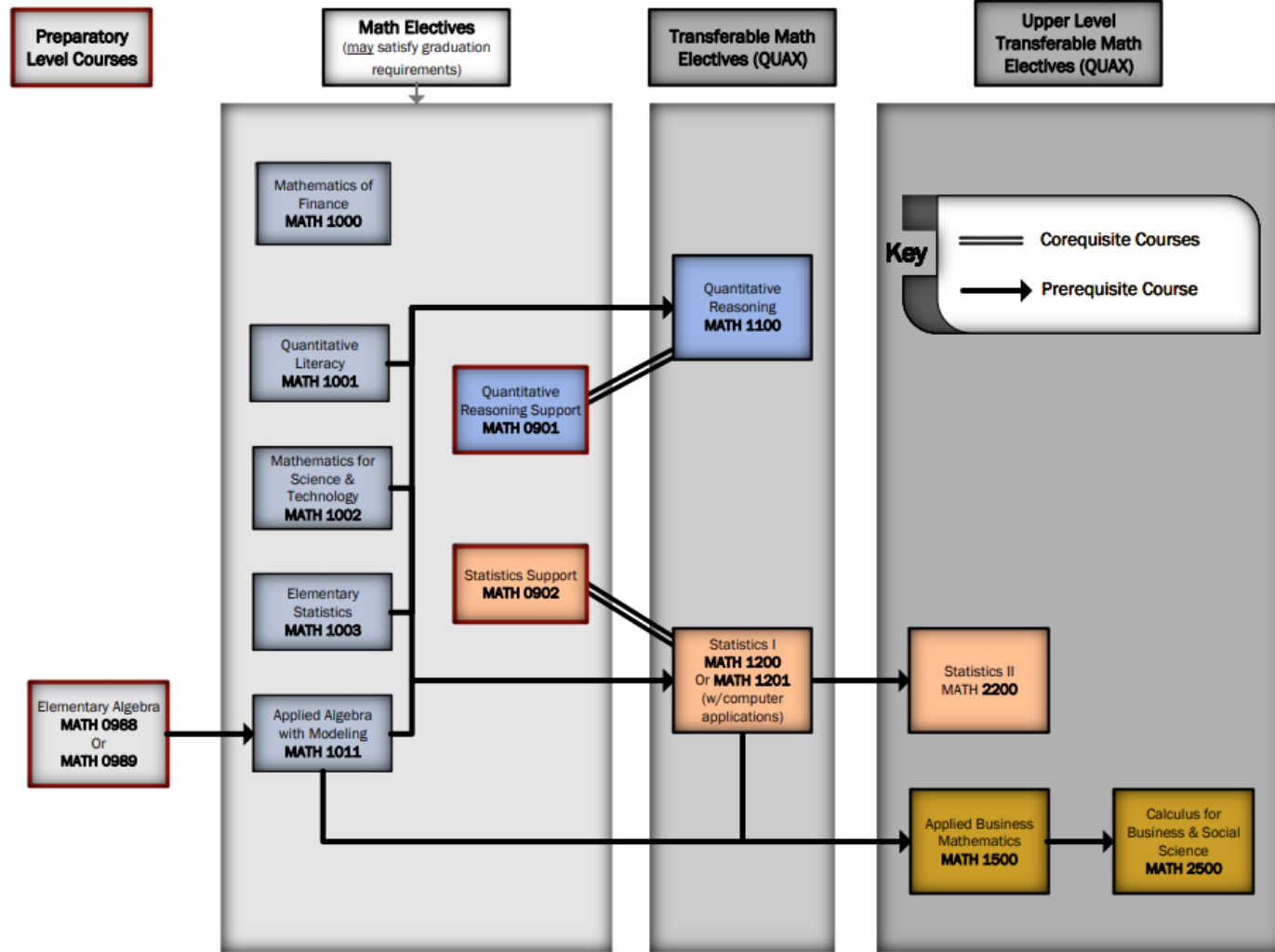
- Think of non-stem as the programs that don't require MATH 1600 or higher.
 - We will provide the list but consider, Humanities and Business as the largest
 - In these paths, we would like to simplify the number of placement levels. We would like to empower advisors to consider for default placement, the 1000-level courses: 1000,1001,1002,1003 (Again, this only for NON-STEM)
 - We would also like to remove PPL as a primary placement tool for NON-STEM programs

23	Criminal Justice, Victimology - A.S.	MATH 1000 or higher	MATH 1100 or MATH 1200
24	Culinary & Hospitality: Hospitality and Tourism Management - A.S.	MATH 1000 or higher	
25	Cyber and Homeland Security - A.S.	MATH 1000 or higher	
26	Dance - A.A.	MATH 1000 or higher	MATH 1100
27	Dental Hygiene Degree - A.S.	MATH 1000 or higher	MATH 1011
28	Digital Arts Technology - A.S.	MATH 1000 or higher	MATH 1100 or MATH 1200
29	Disability Specialist -AS	MATH 1000 or higher	MATH 1100 or MATH 1200 or MATH 1201
30	English Studies - TAP/CSCU Transfer Degree - A.A.	MATH 1000 or higher	MATH 1100
31	Game Design - A.S.	MATH 1000 or higher	

CHART FOR NON-STEM

SAT	ACT	GPA	Course
<510	<17	<2.8	MATH 0988/0989 Bootcamp/PPL
<510	<17	<2.8	MATH 1000, 1001, 1002, 1003
510-529	17-19	2.8-3.09	MATH 0902 & 1200; MATH 0901 & 1100 OR MATH 1011
≥530	≥20	≥3.1	MATH 1100 or MATH 1200/1201

CT State – Non-Stem Math Pathways



Fall 2024



Default Placement for non-STEM

- In this new process all students have the option to start in **1000-1003 level** courses:
 - MATH 1000(Math for Finance)/MATH 1001(QL)/1002(Tech Math)/1003(Elementary Stats) or the historic MATH 0988/0989
 - If they have a low GPA, SAT, or ACT **any** of the above can be their default.
 - If they have no metrics the **any** of above can be their default.
 - Students placing below Math 1100/1200 should be asked if they are happy with their placement(you can use the non-STEM self-appraisal to guide your conversation):
 - If yes, wish them a happy term!|
 - If no, once the student is registered, hand them the PPL flyer which will include directions to test, remediate, and retest (in a proctored environment)with the needed score(s) for their goal course(s).
-

Guiding the conversation on initial math course selection

This statement sounds...	Column 1 not at all like me	Column 2 Somewhat like me	Column 3 very much like me
I can read and understand math word/story problems and am able to identify the essential information.			
I actively participate in class discussions and activities, and regularly complete my assignments on time.			
I can interpret the solutions to math problems and can usually tell when an answer is not reasonable.			
I work persistently to solve math problems, even if the problems are challenging or unfamiliar to me.			
I feel comfortable seeking help from an instructor or tutor when I do not fully understand something.			
Previous Math Experiences	Check the response that best describes you		
In high school, I took ____ math classes.	2 or fewer	3	4 or more
I typically earn _____ in math classes.	D's or F's	B's or C's	A's
I took my last math class _____.	more than 3 years ago	1-3 years ago	less than one year ago
My highest math class was _____.	Not sure	Algebra 1	Algebra 2
Without a calculator...	Unfamiliar and unsure if I am ready to learn	Unfamiliar but ready to learn	Familiar and I can do it
Write in order: $5, -3, \frac{5}{2}, -\frac{1}{4}, 0, 2.75, -0.5$			
Round to the nearest tenth: 38.249			

Math 1000-Math of Finance

PROS:

- 3 credits
- Satisfies graduation at the associate's level
- An elementary course covering a wide range of mathematics commonly used in business and personal finance.
- Topics include simple and compound interest, present value, wages, taxes, insurance, and marketing and retailing mathematics
- Early data indicates this may be a more approachable course for students than developmental algebra
- Ideal for students who have no need for further study of mathematics because they do not intend to continue beyond their associate's degree.

Cons:

- Does not satisfy graduation at the CSUs; only transfers as an elective, not a math credit
- Limited course offerings/modalities



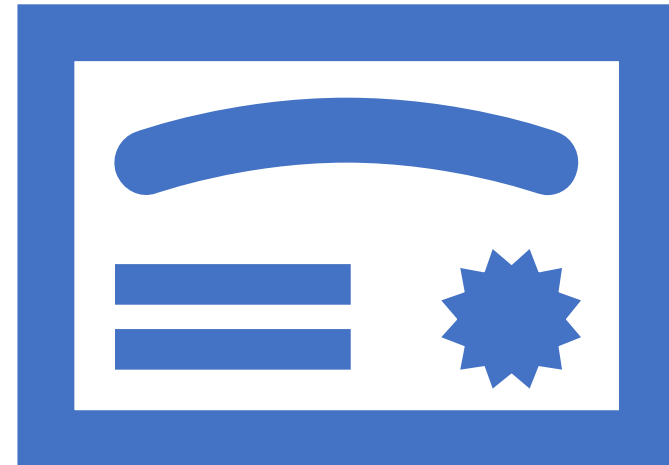
MATH 1001-Quantitative Literacy

Pros:

- 3 credits
- Satisfies graduation at the associate's level
- An introduction to college-level mathematical reasoning with an emphasis on numerical fluency. Topics include introductions to personal finance, data analysis, and basic probabilities.
- Early data indicates this may be a more approachable course for students than developmental algebra
- Dove-tails nicely with MATH 1100 (Quantitative Reasoning)

Cons:

- Does not satisfy graduation at the CSUs; only transfers as an elective, not a math credit
- Limited course offerings/modalities



MATH 1002

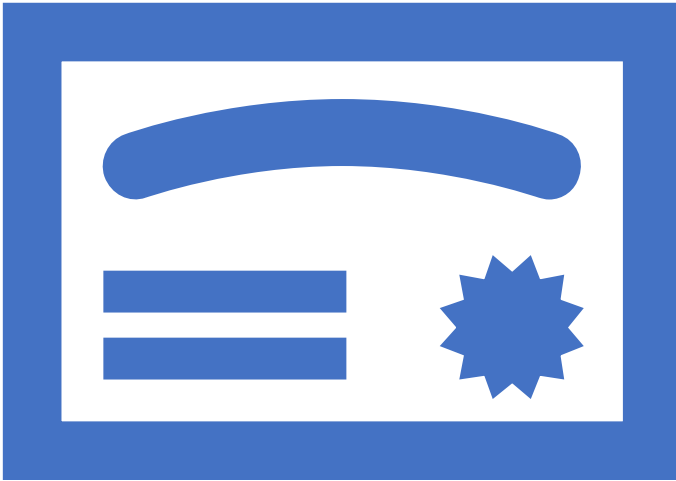
Math for Science and Tech

Pros:

- 3 credits
- Satisfies graduation at the associate's level
- An introduction to college-level mathematical reasoning with an emphasis on technical applications including scientific notation, unit conversions, and right triangle trigonometry.
- Satisfies the pre-req to Concepts of Chem

Cons:

- Does not satisfy graduation at the CSUs; only transfers as an elective, not a math credit
- Limited course offerings/modalities



MATH 1003

Elementary Statistics

Pros:

- 3 credits
- Satisfies graduation at the associate's level
- An introduction to college-level statistical reasoning with an emphasis on descriptive statistics. Topics include introductions to variance, visual representations of data, and probability.
- Early data indicates this may be a more approachable course for students than developmental algebra
- Early exposure to statistical software
- Dove-tails nicely with MATH 1200 (Statistics I)

Cons:

- Does not satisfy graduation at the CSUs; only transfers as an elective, not a math credit
- Limited course offerings/modalities



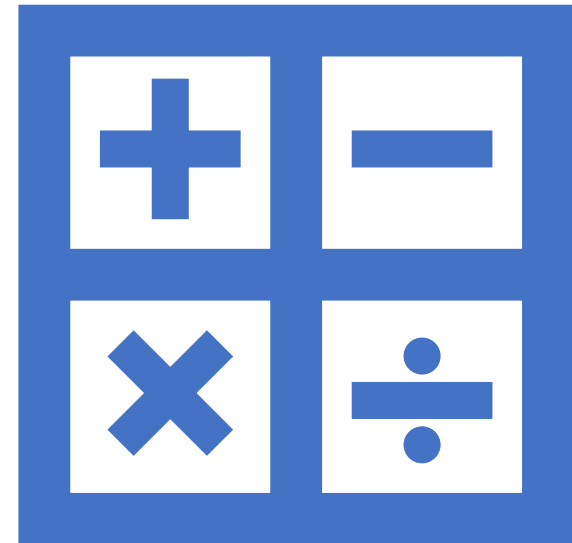
MATH 0988/0989-Developmental Options

Pros:

- An opportunity for review of high school mathematics
- Early exposure to graphing calculator
- Satisfies the prerequisites to MATH 1011 and MATH 1010 in the STEM pathway to Calculus
- A good option for completely undecided students (should be paired with CCS 1001)
- Grade is exempt from graduation GPA

Cons:

- Does not satisfy graduation requirements at any level
- 0988 is 6 credits
- Grade can impact financial aid status



What needs to be done before launch?

1. Familiarize yourself with the list of non-STEM programs
2. Familiarize yourself with any courses that are new to you.
3. Prepare copies of the revised PPL flyer which will include a place to write in the program, goal course number(s) and goal course placement score(s) from a proctored assessment.
4. Prepare copies of the course add/drop procedure
5. Prepare copies of a chart of the co-req CRN's of 1100 and 1200 to be handed out with the above directions in the hope that students will improve to at least the co-req level.
6. Your local math team is on hand to assist you and also provide more specific course recommendations for your unique campus populations

STEM

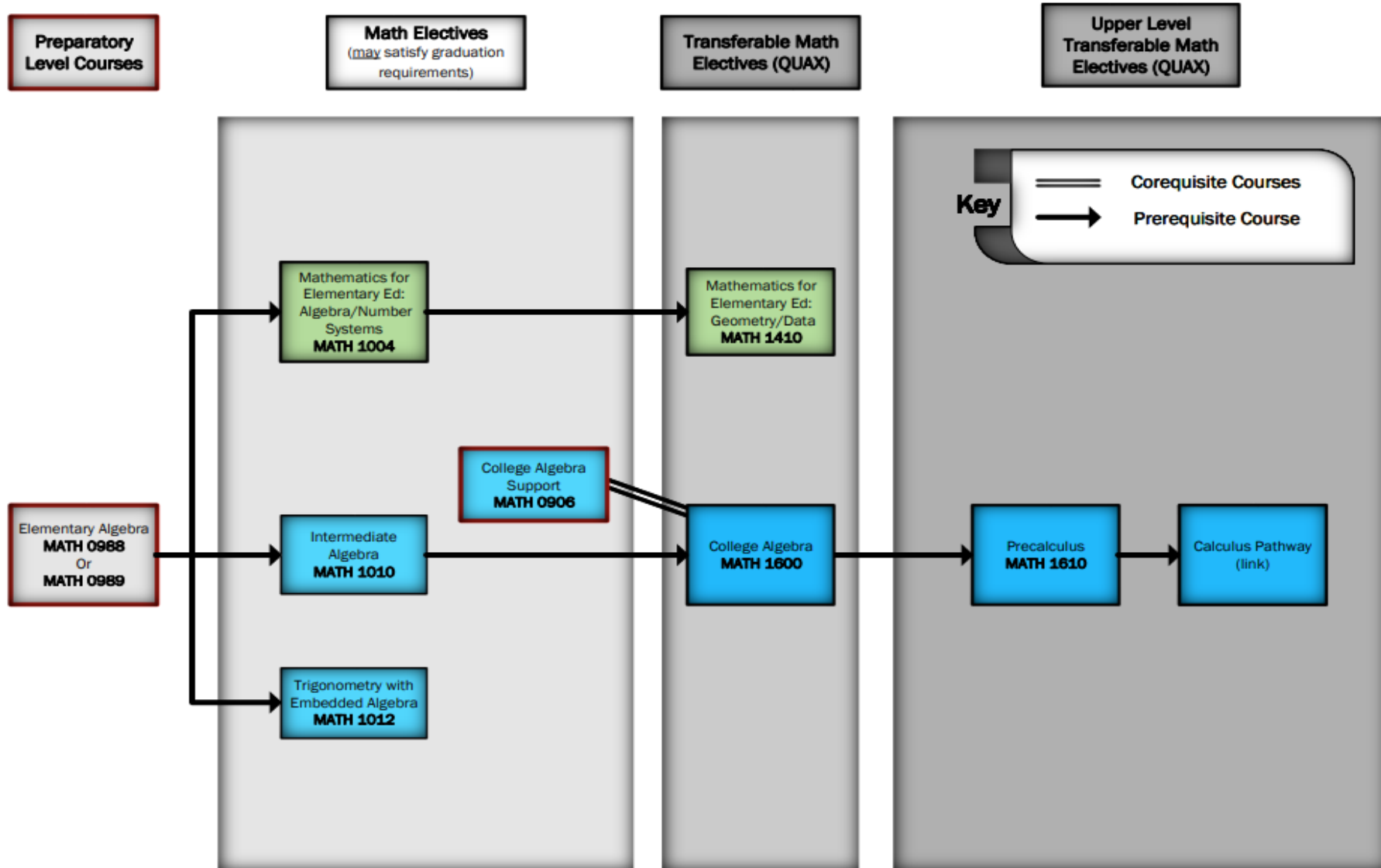
- Think of stem as the programs that require College Algebra or higher.
 - We will provide the list but consider, Engineering, College of Technology, and physical science and math majors as the largest.
 - This path is for students who need College Algebra or above, ie they are on the Pathway to Calculus.
 - In this path there are no changes to the sequence of courses from last semester. Developmental → 1010 → 1600 → 1610 (and beyond)
 - ↳ or co-req (0902 & 1600) → 1610 (and beyond)
 - Rather than a PPL for all model, we would like to reserve PPL only for students who are unhappy with their default placement and recommend they register, test, remediate, proctored re-test, and then add/drop

25	Environmental Science: Environmental Science and Toxicology - Certificate	MATH 1610
26	Environmental Science: Natural Resources - A.S.	MATH 1610
27	Mechanical Engineering Technology - A.S.	MATH 1610
28	Radiation Therapy: Gateway Option - A.S.	MATH 1610
29	Radiation Therapy: Manchester Option - A.S.	MATH 1610
30	Technology Studies: Advanced Manufacturing Machine Technology Option #1 - A.S.	MATH 1610
31	Technology Studies: Advanced Manufacturing Technology Option #2 - A.S.	MATH 1610

CHART FOR STEM

SAT	ACT	GPA	Course
<510	<17	<2.8	Bootcamp or MATH 0988
<510	<17	<2.8	MATH 0989
510-529	17-19	2.8-3.09	1010
530-569	19-21	N/A	MATH 0906 & 1600
570-611	22-23	N/A	MATH 1600
612-654	24	N/A	MATH 1610
≥655	≥25	N/A	MATH 2600

CT State – STEM & Education Math Pathways



Default Placement in STEM

- In this process all students have must have a numeric placement metric to place out of the default courses:
 - MATH 0988(6 cred)/0989(3 credits)
- If they have a low GPA, SAT, or ACT MATH 0988/0989 must be their default.
- If they have no metrics MATH 0988/0989 must be their default.
- Students placing below MATH 1600, should be asked if they are happy with their placement. (you can use the STEM self-appraisal to guide your conversation):
 - If yes, wish them a happy term!
 - If no, once the student is registered, hand them the PPL flyer which will include directions to test, remediate, and proctored retest with the needed score(s) for their goal course(s)(MATH 1600 or higher).
 - Additionally, you should provide documentation on how to add/drop a course.
 - Your team should also have a grid that simplifies the co-req offerings at your campuses

Guiding the conversation on initial math course selection

	Column 1	Column 2	Column 3	Column 4
This statement sounds...	not at all like me	somewhat like me	mostly like me	very much like me
I can read and understand math word/story problems and am able to identify the important information.				
I actively participate in class discussions and activities, and regularly complete my assignments on time.				
I am able to interpret the solutions to math problems and can usually tell when an answer isn't reasonable.				
I work persistently to solve math problems, even if the problems are challenging or unfamiliar to me.				
I feel comfortable seeking help from an instructor or tutor when I do not fully understand something.				
Previous Math Experiences			Check the response that best describes you	
In high school, I took ____ math classes.	2 or fewer	3	3-4	4 or more
I typically earn _____ in math classes.	D's or F's	C's	B's	A's
I took my last math class _____.	more than 3 years ago	2-3 years ago	1-2 years ago	less than one year ago
My highest math class was_____.	Not sure	Algebra 1	Algebra 2	Algebra 2
Without a calculator...	Unfamiliar and unsure if I am ready to learn	Unfamiliar but ready to learn	Familiar but need review	Familiar and I can do it
Simplify: $4(3 - 6)^2 - (7 - 5^2) + 2^3$				

What needs to be done before launch?

1. Familiarize yourself with the list of STEM programs
2. Familiarize yourself with the courses in the Pathway to Calculus sequence
3. Prepare copies of the revised PPL flyer which will include a place to write in the program, goal course number(s) and goal course placement score(s) from a proctored assessment.
4. Prepare copies of the course add/drop procedure
5. Prepare copies of a chart of the co-req CRN's of 1600 to be handed out with the directions in the hope that students will improve to at least the co-req level.



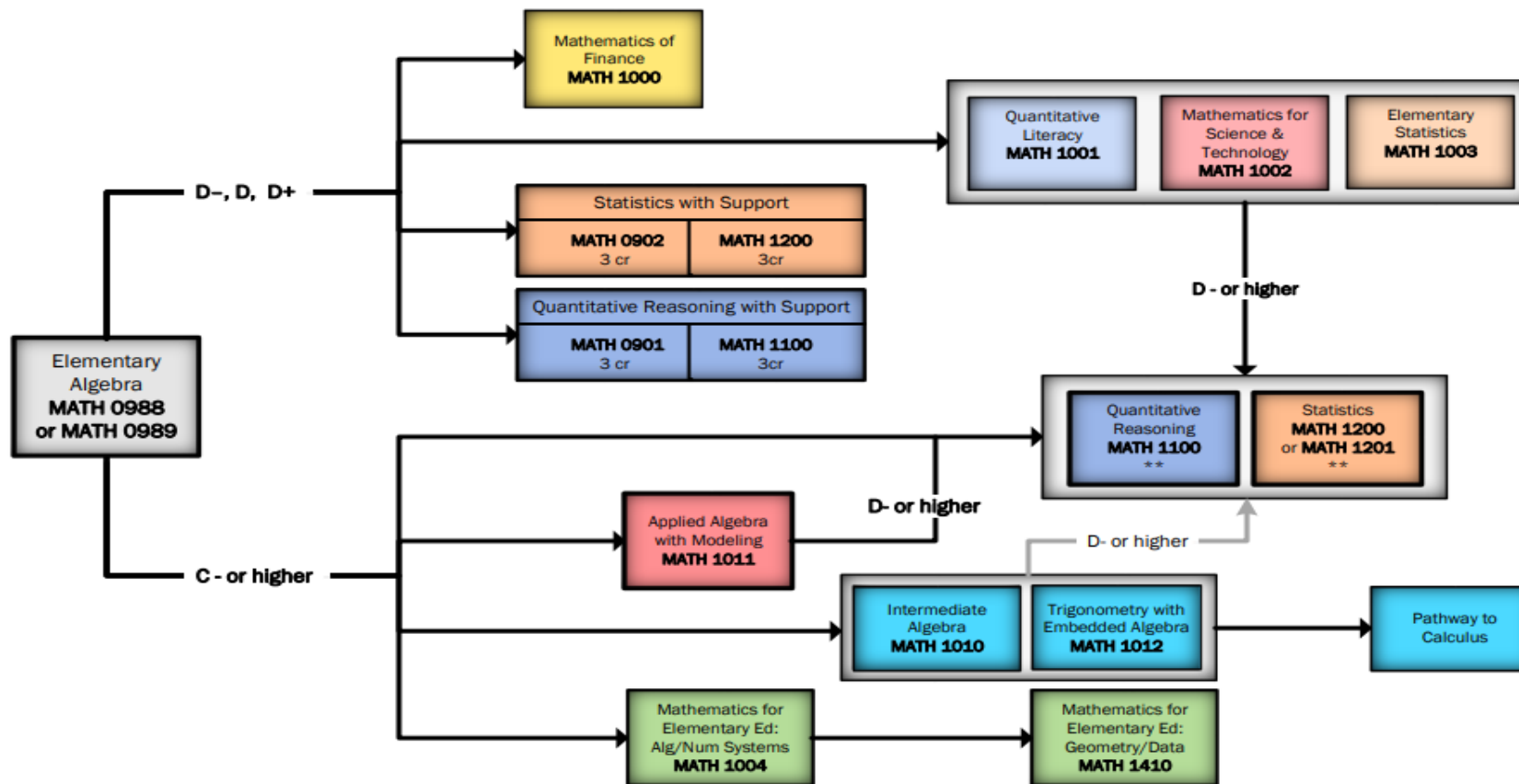
Students already in
the pipeline

Advising for Continuing Students

- You will see students who need to progress in the NON-STEM path but have completed MATH 0988/0989
- We are providing flow charts for continuing MATH students based on what course they have completed and the grade.

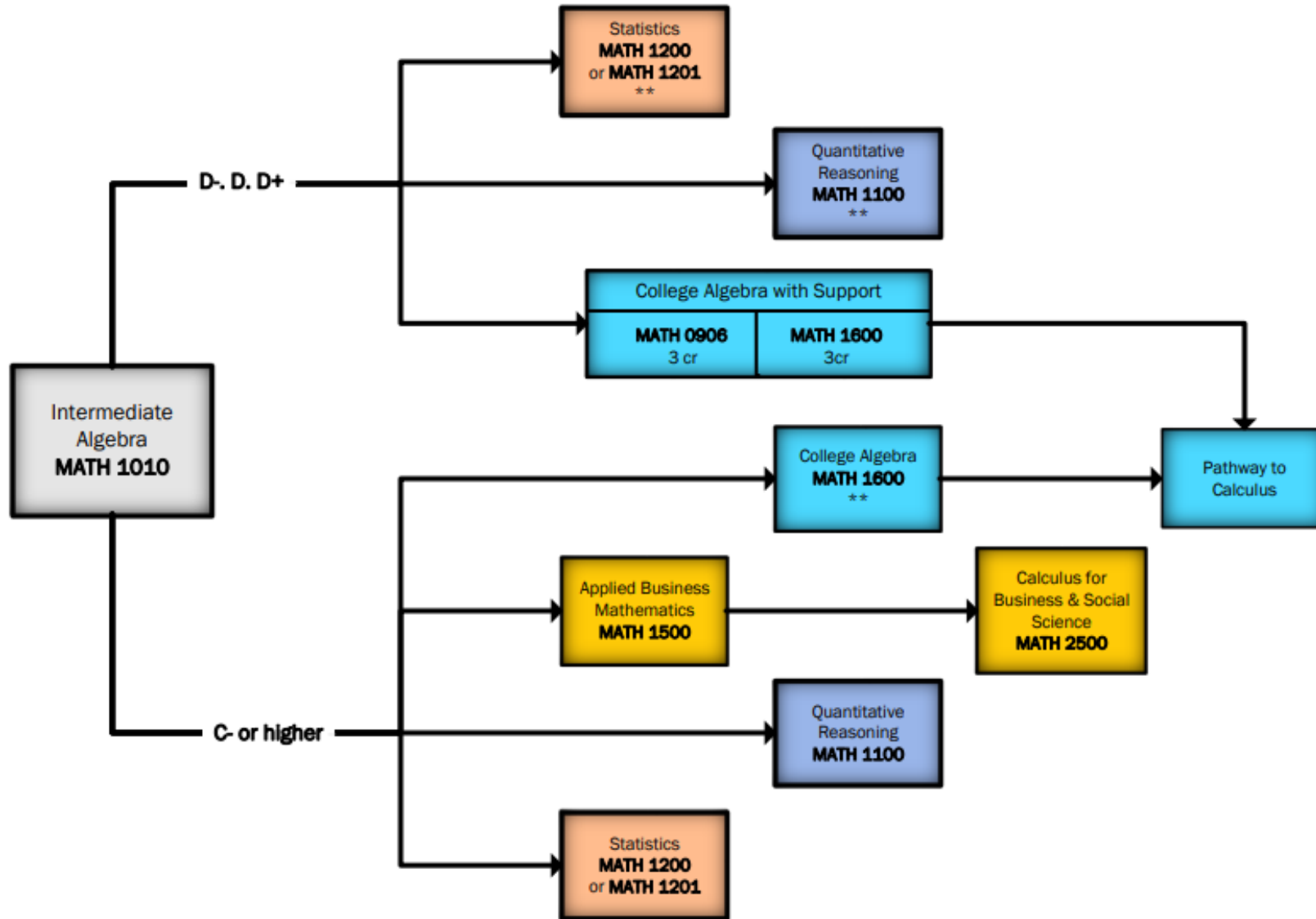
CT State - Math Course Recommendations for Continuing Math Students

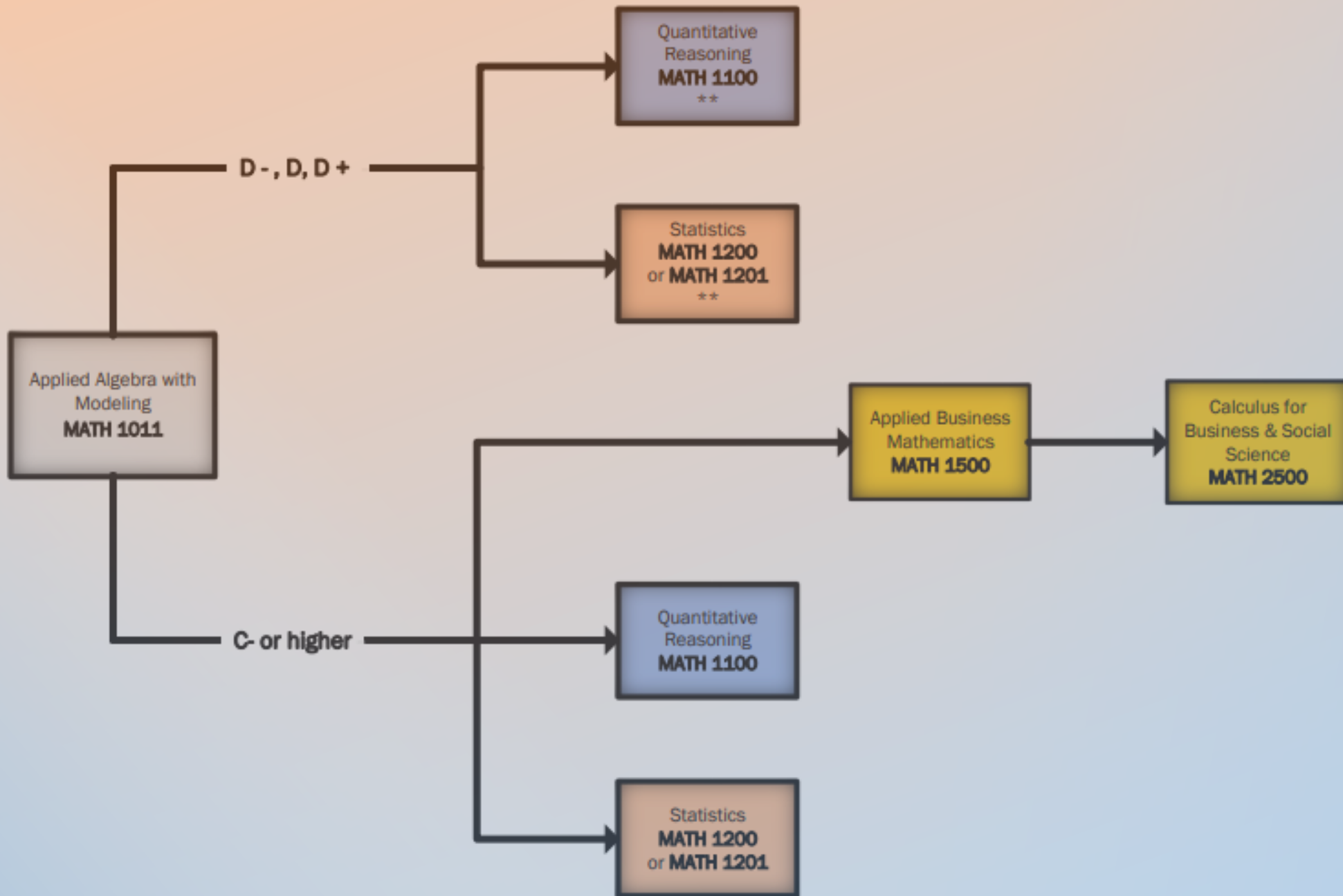
When determining Math placement, first consideration is the Math course needed for the specific degree.
 For students planning to transfer, Quantitative Reasoning (MATH 1100) or Statistics (MATH 1200/1201) should be considered in most cases, even if a lower math can allow for graduation from CT STATE.

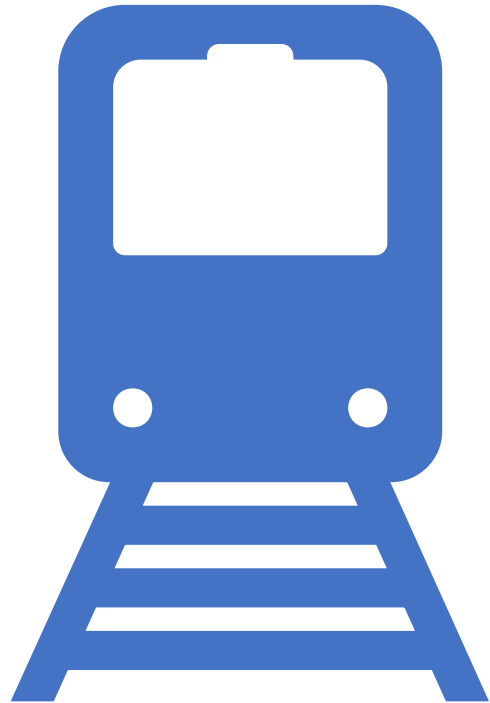


* Students needing 1600 for their program will need to repeat 0988/0989 if they receive a grade below a C-

** Many students will benefit from the support courses, even when not required, due to the added content of the course to support success.







LAS and Gen Studies

- Do your best to get students out of Gen Studies at their intake appt.
- Gen studies does not have the “guardrails” for transfer, nor does it have the focus areas for preparation for workforce. Gen studies is for a smaller population of students.
- Without much time, you should be able to ascertain whether the student is considering STEM or non-STEM.
- At the very least they should go into LAS AS (STEM) or LAS AA(non-STEM). This ensures they are working towards a credential with the correct variety of humanities and stem (including MATH) courses. And is more likely to transfer and have the student on track for junior standing.

Recap of Changes

- You will only need to identify if a student is non-STEM or STEM
- Students in non-STEM will have the **option** to start in a 1000-level course even if coming in at the lowest level of placement
- There are only two self-appraisals, and they are at your discretion to deploy
- All students will register for a math course BEFORE offering PPL.
- For students who are offered PPL, the messaging is test → remediate → proctored retest → add/drop to higher course.



Questions??

Thank you!

Marina Philips @ Housatonic
Amanda Sweeney @ Gateway