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Policy Name: Basic Skills Testing & Placement	Policy Number: A - 5
Functional Area(s) Responsible: Academic & Student Affairs	
Owner(s) of Policy: Academic & Student Affairs	
Most Recent BOT Approval Date: September 4, 2024	
Most Recent Review Date: Spring 2024	
Most Recent Review/Revision Type: ☐ none ☐ minor/non-substantive	☑ substantive/extensive
Policy Statement: To ensure appropriate placement for a successful college experience, Finger II (matriculated and non-matriculated) are required to demonstrate their level writing, mathematics and music theory, if applicable, prior to registration. Stutaking the appropriate FLCC administered test(s), essay completion, and/or tresults and/or the evaluation of a transcript, students not demonstrating the required to register for one or more preparatory courses in English, Mathematical Policy (matriculated) are required to register for one or more preparatory courses in English, Mathematical Policy (matriculated) are required to demonstrate their level of the properties	of basic skills proficiency in reading, udents will demonstrate proficiency by ranscript review. Based upon their test appropriate level of proficiency will be
Reason(s) for Policy: This policy was created to assess the skill levels with which students enter the	College.
Applicability of Policy: All faculty, staff, prospective and accepted students should be familiar with th	is policy.
Definitions: None	
Related Documents: • 24 Credit Hour Program policy • Early Admission policy • NYS Educational Law	
Procedures:	

Placement Guidelines

Reading and Writing Placement

All incoming students shall be assigned a placement level by transcript review or exemption status. English 095 and English 101 are now co-requisites meaning that they may be taken at the same time. Students will be placed as follows:

Students meeting one of the following criteria will be assigned a placement level of English 101 (ENG 101):

- Students who have earned credit for a course equivalent to English 095 from another institution.
- Students who have a cumulative GPA of 75 or higher at the end of their Junior or (if available) Senior year of high school
- Students who have scored a minimum of 500 on the written portion of the SAT.
- Students who have scored a minimum of 21 on the English Portion of the ACT.
- Students who score 165 or higher on the GED
- International students who score 6 or above on their IELTS or a 60 or above on the TOEFL

Students who have earned college credit for a course equivalent to English 101, Composition 1 will be placed in English 103.

Additionally, students who have earned a Bachelor's and/or Master's degree are exempt from English 101, 102, and 103.

Students who do not meet the above criteria will be assigned an ENG 095 placement unless they complete an Appeal Essay that is determined to be at the ENG 101 level. Appeal Essays are reviewed by the Humanities Department Chairperson or designee.

Mathematics Placement

Math placement level is an indication of where students place in terms of algebraic fluency. All incoming students shall be assigned a placement level by high school transcript review (and/or an SAT or ACT score or GED score). High school transcript review requires that transcripts be no more than 4 years old.

GED Mathematical Reasoning scores that are no more than 2 years old in the following score areas can be accepted as math placement:

GED Mathematical Score Range	Math Placement Level
145-165	Level 1
165-174	Level 2
175-200	Level 3

In the event that a transcript review is not possible at the time of registration, the student will need to take the ACCUPLACER placement test to be assigned a placement level. In this case, a student may appeal their assigned placement level by providing a high school transcript for review.

Any student who has had a high school transcript review and who still wishes to challenge their placement level may do so by meeting with the Mathematics Department Chairperson, who will make a final determination as to the student's placement level.

International Students must take the math placement test prior to registration.

Advising students into mathematics courses (Updated 3/24)

Considering that students arrive at FLCC with varied mathematical backgrounds, we offer the charts below as guidance with respect to an appropriate entry point for your advisees.

Incoming matriculated students are assigned a mathematics placement level of 1, 2, 3, or 4. A student's placement is really an indication of algebraic fluency, and it informs where the student lies along the "Algebra to Calculus" sequence. Based upon the student's **program of study and this placement level**, the student is then advised to take a course that's either in the "Algebra through Calculus" (MAT 097 through MAT 271) sequence, a statistics course (MAT 121, MAT 165 or MAT 200) or another course (MAT 101, MAT 110, MAT 160, MAT 180, or MAT 220).

If you have *any questions* about advising your students into mathematics courses, please feel free to contact the chairperson (Bryan Ingham) or any member of the Mathematics Department. We are happy to help!

Non Algebra Sequence Courses With Placement Requirements			
If student has achieved:	OR has met the prerequisite:	Students may register for:	
Any math placement level		MAT 101 Mathematics for Liberal Arts, MAT 110 Mathematics of Money, or MAT 121 Introductory Statistics I.	
Level 3* or higher	C- or higher in MAT 145	MAT 165 Intro to Data Science or MAT 200 Statistics	
Level 4* or higher	C- or higher in MAT 152	MAT 160 Introduction to Discrete Mathematics	
	C- or higher in MAT 271	MAT 220 Discrete Mathematics for Computing	

Algebra to Calculus Sequence			
If student has achieved:	OR has met the prerequisite:	Students may register for:	
Level 1*		MAT 097 Algebra and Introduction to Functions	
Level 2*	C- or higher in MAT 097	MAT 145 Survey of Functions I	
Level 3*	C- or higher in MAT 145	MAT 152 Precalculus (Survey of Functions II)	
Level 4*	C- or higher in MAT 152	MAT 271 Calculus I	

^{*}Achieving a particular Math Placement Level is determined by either a student's high school or college transcript review OR the student's score on the ACCUPLACER Next-Gen placement test.

Please refer to the additional notes on the next pages...

- 1. MAT 097 Algebra and Introduction to Functions (4 imputed credits) does not earn a student MAT credit or SUNY General Education credit. This course should only be taken by students who need:
 - a. to complete MAT 145 or higher, (excluding MAT 180, MAT 280)
 - b. a particular Science class (CHM 121 or SST 116)
- 2. MAT 101 Mathematics for Liberal Arts (3 credits) does **not** have a prerequisite and does **not** require a particular math placement level. MAT 101 meets minimum requirements for programs that do not specify a particular

MAT course, and the course carries SUNY General Education credit making it suitable for many students who do not wish to pursue further mathematics or science courses.

This course studies the use of mathematics in areas of business and industry, politics, networking and telecommunication with the intent to develop reasoning ability, logical thinking, critical reading, and written and oral communication. The topics are selected so that they are self-contained.

3. MAT 110 Mathematics of Money (3 credits) does **not** have prerequisites and does **not** require a particular math placement level. MAT 110 meets minimum requirements for programs that do not specify a particular MAT course, and the course carries SUNY General Education credit making it suitable for many students who do not wish to pursue further mathematics or science courses.

The topics studied include simple interest, simple discount, compound interest, present and future value of annuities, and other specific financial applications.

The course emphasizes the use of spreadsheets; in addition to using formulas, algebra, calculators, and estimation techniques.

4. MAT 115 Mathematics for Health Care Professionals (1 credit) does **not** have a prerequisite and does **not** require a particular math placement level.

The intended audience for this course is nursing students. It is a co-requisite of NUR 100 and a prerequisite for NUR 101.

This course uses dimensional analysis as the primary computational tool. The course will proceed from dosage calculations involving tablets and capsules to the more complex calculations involving therapeutic safe dose ranges and intravenous infusions.

5. MAT 121 Introductory Statistics I (3 credits) does <u>not</u> have a prerequisite and does <u>not</u> require a particular math placement level. This course is suitable for students in programs that specify this course as well as for students whose programs do not specify a particular MAT course.

This course does **not** prepare students for MAT 145.

Successful completion of MAT 121 (with a grade of C- or higher) qualifies as having met the prerequisite for MAT 122 Introductory Statistics II. This course does carry SUNY General Education credit.

Topics include measures of central tendency, variability, graphical displays, linear correlation and regression, dependent and independent probability, discrete and continuous probability distributions. The course will emphasize computer or calculator use (graphing calculator, StatCrunch, etc.) to obtain results.

6. MAT 145 Survey of Functions I (3 credits/4 contact),
MAT 152 Precalculus (Survey of Functions II) (3 credits/4 contact), and

MAT 271 Calculus I (4 credits)

all require math placement, as outlined in the chart above.

These courses earn SUNY General Education MAT credit but should only be taken by students whose programs or transfer institutions require them, or by students who need a two-course math sequence.

7. <u>MAT 160 Introduction to Discrete Mathematics</u> (4 credits) requires a math placement level 4 or successful completion of MAT 152 Pre-Calculus (with a grade of C- or higher). This course does carry SUNY General Education credit.

This course serves as an introduction to many of the principal topics of discrete mathematics, including number systems, sets, logic, relations, combinatorial methods, graph theory, regular sets, vectors and matrices.

8. <u>MAT 165 Introduction to Data Science</u> (3 credits/4 contact) requires math placement_level 3 or successful completion of MAT 145 Survey of Functions 1 (with a grade of C- or higher).

This course covers techniques for working with data, including getting and cleaning data, exploratory data analysis, data visualization, and statistical modeling and prediction. Students will learn how to ask good questions, apply data to practical problems, and communicate data analytic results. Statistical computing is integrated into the course.

This course is required for the A.S. in Computer Information Systems degree and **strongly encouraged** for the A.S. in Psychology degree.

9. <u>MAT 180 Mathematics for Elementary School Teachers I</u> (3 credits) does <u>not</u> have a prerequisite and does <u>not</u> require a particular math placement level. This course does carry SUNY General Education credit.

This is the first of a two-course sequence designed for prospective elementary school teachers. It is required in the A.A. Liberal Arts and Sciences: Childhood Education (Teacher Education Transfer) program and in the Teaching Assistant Certificate program.

The course emphasizes problem solving, communication, reasoning and proof, representation, and mathematical connections. Students will explore mathematical concepts and theories underlying the topics which include: set theory; the history of numeration and different number systems, including other base numeration systems; operations on whole numbers, integers, rational numbers, and irrational numbers; and elementary number theory.

Successful completion of MAT 180 (with a grade of C- or higher) qualifies as having met the prerequisite for MAT 280 (Mathematics for Elementary School Teachers II).

10. <u>MAT 200 Statistics</u> requires math placement level 3 or successful completion of MAT 145 (with a grade of Corhigher), as outlined in the chart above.

This course is a requirement for students who pursue the A.S. Business Administration and an option for the A.S. Psychology degree. It may also be suitable for students whose programs do not specify a particular MAT course. This course carries SUNY General Education credit.

This **one semester** descriptive and inferential statistics course is designed for an experienced mathematics student. Topics included are measures of center; measures of dispersion; hypothesis testing; estimating population means, proportions, and variance; determination of sample size; uses of the Chi-square distribution; analysis of variance; linear correlation and linear regression; and statistical research. The course will emphasize computer or calculator use (graphing calculator, StatCrunch, etc.) to obtain results.

11. <u>MAT 220 Discrete Mathematics for Computing (</u>3 credits) requires a prerequisite of MAT 271 Calculus I. This course carries SUNY General Education Mathematics credit.

This course introduces students to ideas and techniques from mathematics that are widely used in computer science. Topics include the fundamentals of logic (propositional and predicate calculus), set theory, relations, recursive structures, and combinatorics. This course will increase students' mathematical sophistication and ability to handle abstract problems. Music Theory

A Basic Skills test in Music Theory is required for students pursuing an AS Music and AS Music Recording degrees. Students who score below a specific cut-off point on the music theory test will be required to enroll in coursework that provides a foundation of music knowledge, MUS 105-Basic Musicianship. As a result, enrollment in MUS 105 will require five semesters for degree completion.

Re-testing

Students wishing to re-take the Reading/Writing and/or Mathematics placement tests may only do so once. Exceptions to these eligibility requirements are at the discretion of the Director of Academic Advising, Career & Transfer Services and the Mathematics and Humanities Department Chairpersons. The music theory section of the test cannot be re-taken.

World Language

World language placement is determined by the student and their corresponding level of language experience. Students and advisors should use the following guidelines to determine which world langue course to take at FLCC:

- If the language you typically use at home is Spanish, French, or ASL, take 203.
- If you use English at home and have not formally studied another language in the last three years, take 101.
- Prior world language credit may also be used for placement purposes and/or a prerequisite, as described in FLCC's Academic Requirements and Policies.

Forms/Online Processes:

None

Appendix:

None