APPENDIX C (continued)

Alternate Methods Quick Guide

Reading and Writing Alternate Placement Criteria using a test score for demonstrating College readiness

TEST ID >	PSATNMSQT10 or PSATDigital^		PreACT		GED (In English)	TASC (In English)		HiSET (In English)
Test Component >	Reading (RD) or EBRW (RWA)^	Writing and Language (WLT)	Reading (RD)	English (ENG)	Reasoning through Language Arts** (RLA)	Language Arts Reading (LR)	Language Arts Writing (LW) and Essay	Language Arts Reading (LR) and Language Arts Writing (LW)
ENC1101*	≥ 24 or ≥ 490^	≥ 25	≥ 22	≥ 18	≥ 165	≥ 580	≥ 560 and ≥ 6	≥ 15

*Both Reading and Writing must be at the ENC 1101 course placement level.
**GED Reading through Language Arts is used for Reading and Writing.
^Digital SAT 3-digit scores since June 2023.

Reading and Writing Alternate Placement Criteria using a course grade earned at a Florida public high school or through AP, IB, Cambridge/AICE

TEST ID >	**TEST ID = HSCOURSE** (Unweighted high school GPA of 3.0 **AND** B* or better) *Course grades associated with a Test ID in MDConnect are converted to numbers (A=5, B=4, C=3, D=2, F=1).
ENC1101	**English 4, English 4 Honors course, or any AP, IB, Cambridge/AICE English course.** Test Components for HS English courses in MDConnect begin with HSE followed by two numbers (e.g. HSE01).

*Course grades associated with a Test ID in MDConnect are converted to numbers (A=5, B=4, C=3, D=2, F=1).

Mathematics Alternate Placement Criteria using a test score for demonstrating College readiness

TEST ID >	PSAT/NMSQT or PSAT 10 (PSATNMSQT10)	PreACT	GED	TASC	HiSET	BST/FSA (End of Course)	ALEKS PPL (ALEKSPPL)
Test Component >	**Math or MAA^**	**Math**	**Math (MREA)**	**Math**	**Math**	**Algebra 1 (ALG1) or Geometry (GEOM)**	**Math**
MAT 1033 MGF 1130* MGF 1131*	≥ 24 or ≥ 480^	≥ 22	165-174	≥ 560	≥ 15	≥ Level 4	30-45
MAC 1105 MAC 1106 STA 2023	≥ 26.5 or ≥ 530^	≥ 22	175 – 200	≥ 700	≥ 18	Not applicable	46-60
	≥ 31 or ≥ 620^ Refer to Math Department	≥ 27 Refer to Math Department					61-75 (MAC 1114, MAC 1140, MAC 1147, MAC 2344)
							76-100 (MAC 2311)

*Courses designated for Mathematical Thinking (Non-Algebra) Pathway students. ^Digital SAT 3-digit scores since June 2023.

Mathematics Alternate Placement Criteria using a course grade earned at a Florida public high school or through AP, IB, Cambridge/AICE

TEST ID >	**TEST ID = HSCOURSE** (Unweighted high school GPA of 3.0 **AND** B* or better) *Course grades associated with a Test ID in MDConnect are converted to numbers (A=5, B=4, C=3, D=2, F=1). Any student who meets minimum college readiness level may use just course grade for higher level math courses.
MAT1033 MGF 1130* MGF 1131*	**Algebra 1, Algebra 1 Honors, Algebra 2, Algebra 2 Honors, Pre-Calculus Honors, Calculus Honors, Geometry, Geometry Honors, Probability and Statistics with Applications Honors, Math for College Algebra, Math for College Statistics, Math for College Liberal Arts, or any AP, IB, Cambridge/AICE math course.** Test Components for HS Math courses in MDConnect begin with HSM followed by two numbers (e.g. HSM01).
MAC1105 MAC1106 STA 2023	**Algebra 2, Algebra 2 Honors, Pre-Calculus Honors, Calculus Honors, or any AP, IB, Cambridge/AICE math course. Probability and Statistics course can only be used for MGF1131 or STA 2023.**
MAC 1114 MAC 1140 MAC 1147 MAC 2233	**Pre-Calculus Honors or Calculus Honors course, or any Mathematics course offered through the AP, IB, or Cambridge/AICE programs that would grant the equivalent course credit.**
MAC 2311	**Calculus course or any Mathematics course offered through the AP, IB, or Cambridge/AICE programs that would grant the equivalent course credit.**

*Courses designated for Mathematical Thinking (Non-Algebra) Pathway students.

SPECIAL NOTE: *Test scores are **not** required for exempt students. Exempt students are all students who entered 9th grade in a Florida public school in the 2003-2004 school year, or any year thereafter, and earned a standard diploma from a Florida public high school and students who are serving as active-duty members of any branch of the United States Armed Forces.*

APPENDIX D

General Placement Recommendations for Advisement

Tables 2-5 summarize the developmental education sequence for each subject area within selected meta-majors. Refer to Appendix E. The tables describe the standard sequences assuming students are successful in each course in the sequence. It is important to note that in all cases, students can complete the developmental education sequence and at least one college-level course within two (2) semesters.

Description of Specific Developmental Education Strategies and Related Advisement Recommendations

Modular Courses (MAT0057; REA 0056; ENC 0056)
Modularized instruction is customized and targeted to address specific skills gaps, based on an in-class course diagnostic. Some of the key features of MDC's modular courses include:

- a credentialed faculty member in the classroom at all times with regular office hours every week to provide additional assistance
- selected video vignettes, each presented by a member of the faculty
- guided instruction using small groups to support computer learning

Students who choose to take modular courses:

- must have basic knowledge of computers and be comfortable learning with an on-line program
- need reliable access to computers outside the classroom (at home, at the library, in a lab, etc.)

Modular courses are recommended for students requiring remediation in various subject areas, as well as for students who may be taking a compressed course in another area.

Students who complete a modular course prior to the end of the scheduled term can enroll in a subsequent course in sequence with departmental approval if such course is offered during one of the mini-terms within the major semester.

Compressed Course Structures (REA 0007; REA 0017; ENC 0015; ENC 0025)
Compressed course structures provide accelerated student progression from developmental instruction to college-level coursework, typically in one semester. Faculty incorporate time management and study skills during the early stages of the course. The compressed structure provides more faculty/student contact time per day, and typically for a minimum of 4 course sessions per week.

Students who choose to take accelerated courses:

- should not take more than one accelerated course per 8 week term, but can take back to back accelerated courses within a semester
- must have access to course materials in the first week of the term
- need reliable transportation to campus to attend course every day
- should not work fulltime outside of college
- should complete the basic skills boot camp (Shark Academy) prior to enrollment

Co-requisite Developmental Instruction (MAT 0029/MGF1131 (formerly MGF 1106)
Students in the Mathematical Thinking in Context (Non-Algebra) or Statistical Reasoning pathways can take advantage of the Math-to-Stats track that allows them to complete a college-level mathematics course, MGF1106 while receiving remediation through co-enrollment in MAT 0029. Students will then be able to complete their final mathematics requirement (MGF1107 or STA 2023, depending on their program of study) during their second semester. This co-requisite pathway incorporates group work and student presentations as an integral part of the classroom activities.

Students who choose to enroll in Math-to-Stats:

- must have selected one of the following meta-majors: (a) Arts, Humanities, Communication and Design; (c) Education; (f) Public Safety; (h) Social and Behavioral Sciences and Human Services. Refer to Table 3.
- must verify that their selected program of study at MDC does not require algebra
- must verify that their selected transfer institution does not require algebra

STUDENTS whose AA degree program of study does NOT require algebra (humanities, communications, social sciences other than psychology, hospitality, criminal justice, etc.) should be encouraged to take the **MATH-TO-STATS OPTION.**

APPENDIX D (continued)

General Placement Recommendations for Advisement

Table 2. Algebra Through Calculus Pathway for the Students in the Following Meta-Majors:
(b) Business; (d) Health Sciences; (e) Industry/Manufacturing and Construction; (g) Science, Technology, Engineering and Mathematics

Option #	Pre-enrollment	Semester 1		Semester 2
1	College Readiness Enrichment Program (Strongly Recommended)	MAT 0057 (Modular -16 weeks)		MAT 1033
2	College Readiness Enrichment Program (Strongly Recommended)	MAT 0057 (Modular) (Accelerated – 8 weeks)	MAT 1033 (Accelerated – 8 weeks)	MAC 1105 MAC 1106

Table 3. Mathematical Thinking in Context or Statistical Reasoning Pathways for the Statistics/Liberal Arts Mathematics Track for Students in the Following Meta-Majors:
(a) Arts, Humanities, Communication and Design; (c) Education; (f) Public Safety; (h) Social and Behavioral Sciences and Human Services

Option #	Pre-enrollment	Semester 1	Semester 2
1(*)	College Readiness Enrichment Program (Strongly Recommended)	MAT 0029/MGF 1131 (formerly MGF1106) (Co-requisite – 16 weeks)	MGF 1130 (formerly MGF 1107) or STA 2023

Students in this track can opt to take any of the algebra tracks leading to MAT1033 prior to enrollment in MGF1131 or STA2023; however, the track listed above is **highly recommended.*

Table 4. Developmental Reading Education Pathways for Students in all Meta-Majors

Option #	Pre-enrollment	Semester 1		Semester 2
1	College Readiness Enrichment Program (Strongly Recommended)	REA 0007 (Accelerated – 8 weeks)	REA 0017 (Accelerated – 8 weeks)	ENC 1101
1	College Readiness Enrichment Program (Strongly Recommended)	REA 0017 (Accelerated – 8 weeks)	ENC 1101 (Accelerated – 8 weeks)	ENC 1102
2	College Readiness Enrichment Program (Strongly Recommended)	REA0017 (Modular – 16 weeks)		ENC 1101
1	College Readiness Enrichment Program (Strongly Recommended)	REA 0017 (Accelerated – 8 weeks)	ENC 1101 (Accelerated – 8 weeks)	ENC 1102
2	College Readiness Enrichment Program (Strongly Recommended)	REA 0056 (Modular – 4 weeks)	ENC 1101 (Accelerated – 12 weeks)	ENC 1102

APPENDIX D (continued)

General Placement Recommendations for Developmental Education Advisement

Table 5. Developmental Writing Education Pathways for Students in all Meta-Majors

Option #	Pre-enrollment	Semester 1		Semester 2
1	College Readiness Enrichment Program (Strongly Recommended)	ENC 0015 (Accelerated – 8 weeks)	ENC 0025 (Accelerated – 8 weeks)	ENC 1101
1	College Readiness Enrichment Program (Strongly Recommended)	ENC 0025 (Accelerated – 8 weeks)	ENC 1101 (Accelerated – 8 weeks)	ENC 1102
2	College Readiness Enrichment Program (Strongly Recommended)	ENC0025 (Modular – 16 weeks)		ENC 1101
1	College Readiness Enrichment Program (Strongly Recommended)	ENC 0025 (Accelerated – 8 weeks)	ENC 1101 (Accelerated – 8 weeks)	ENC 1102
2	College Readiness Enrichment Program (Strongly Recommended)	ENC 0056 (Modular – 4 weeks)	ENC 1101 (Accelerated – 12 weeks)	EN C1102

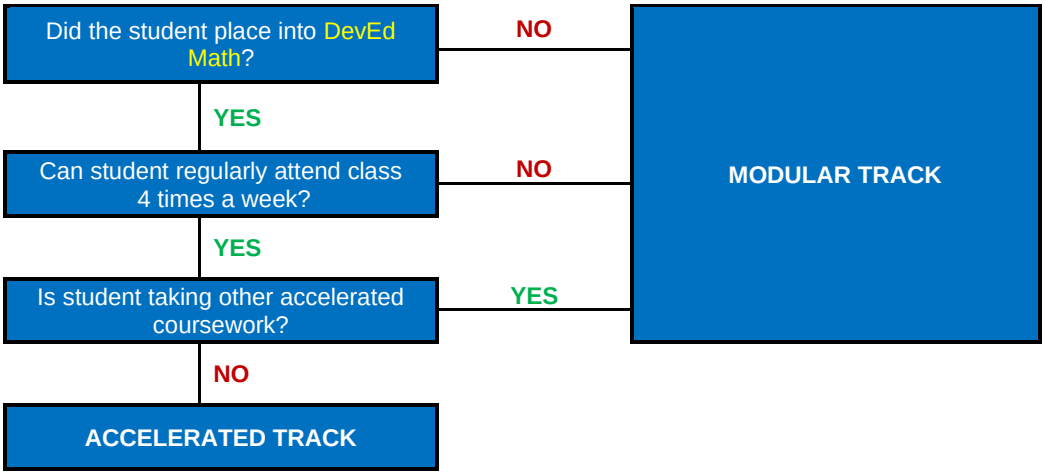
Table 6. Developmental Writing & Reading Education Pathways for Students in all Meta-Majors.
(Students must place into the highest levels of REA **AND** ENC Developmental Education courses to take this course)

Option #	Pre-Enrollment	Semester 1	Semester 2
1	College Readiness Enrichment Program (Strongly Recommended)	ENC 0027 14 Week course (Accelerated)	ENC 1101
2	College Readiness Enrichment Program (Strongly Recommended)	ENC 0027 (Alone or concurrently with ENC 1101) 14 Week course (Accelerated) ENC 1101 16 week course taken concurrently	ENC 1102

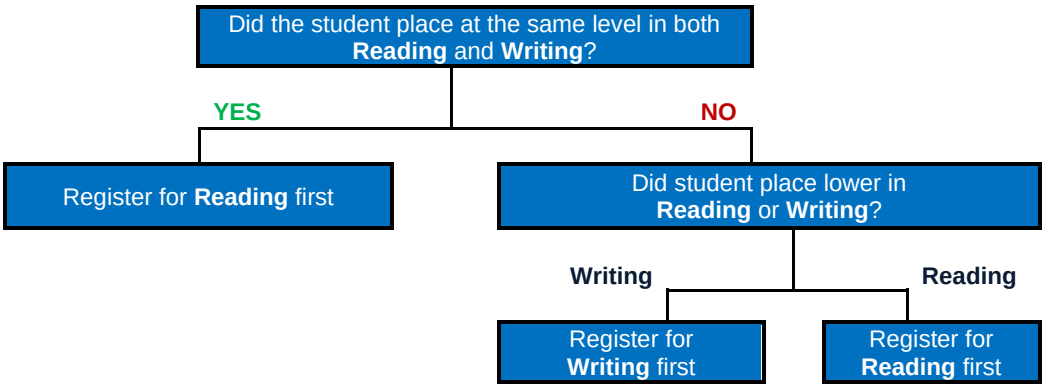
APPENDIX D (continued)

General Placement Recommendations for Developmental Education Advisement

Should a student take a MODULAR or ACCELERATED Math course?



Should a student take Reading or Writing first?
(For students needing remediation in Reading and Writing)



APPENDIX D (continued)

MATHEMATICS PATHWAYS
STARTING FALL 2024

To facilitate seamless transfer of credits, reduce excess credit hours, and ensure students take the courses needed for their future careers, section 1007.23(3), Florida Statutes, requires the statewide articulation agreement to establish three mathematics pathways for students by aligning mathematics courses to programs, meta-majors, and careers.

1. ALGEBRA THROUGH CALCULUS PATHWAY | Gateway Course(s): MAC 1105

- Students in the Algebra through Calculus pathway must be advised to enroll in coursework that includes the following student learning outcomes.
- Demonstrate the knowledge of various algebraic relationships and their application.
- Employ computational techniques to mathematical problem solving.
- Execute appropriate mathematical modeling techniques for solving application problems and interpret results of solutions.
- Develop graphical models using algebraic and problem-solving techniques.
- Articulate a working knowledge of various functions and their application, as appropriate.

2. STATISTICAL REASONING | Gateway Course(s): MGF 1131 and STA2023

- Students in the Statistical Reasoning pathway must be advised to enroll in coursework that includes the following student learning outcomes.
- Analyze data using graphical and numerical methods to study patterns and departures from patterns, using appropriate technology as needed.
- Critically evaluate a data-collection plan to answer a given research question.
- Use probability concepts and simulation.
- Use statistical models to draw conclusions from data.
- Perform correlation and regression analyses.
- Apply statistical reasoning and data analysis to real-world or major-specific examples.

3. MATHEMATICAL THINKING IN CONTEXT | Gateway Course(s): MGF 1130 and MGF 1131

- Students in the Mathematical Thinking in Context pathway must be advised to enroll in coursework that includes the following student learning outcomes.
- Determine efficient means of solving a problem through investigation of multiple mathematical models.
- Apply logic in contextual situations to formulate and determine the validity of logical statements using a variety of methods.
- Apply mathematical concepts visually and contextually to represent, interpret and reason about geometric figures.
- Apply mathematical models to civically contextual situations (e.g., stocks, finance, voting, population dynamics, etc.).
- Recognize the characteristics of numbers and utilize numbers along with their operations appropriately in context.
- Organize, visualize and model data in a meaningful way.
- Analyze and interpret representations of data to draw reasonable conclusions.
- Engage in ways of thinking that may involve sample size, counting strategies, chance, ratios and proportions.

APPENDIX D (continued)

PATHWAY RECOMMENDATIONS

ALGEBRA PATHWAY: This pathway is recommended for majors that require college algebra. The first course in this pathway is MAC1105. The second course is dependent upon the major.

It could be STA2023, MAC2233, MAC1147, etc.…

STATISTICS PATHWAY: This pathway is recommended for majors that require statistics without college algebra. We recommend MGF1131 as the first course in this Pathway, followed by STA2023.

MATHEMATICAL THINKING (NON-ALGEBRA) PATHWAY: This pathway is recommended for majors that do not require college algebra or statistics. The first course that we recommend in this pathway is MGF1130 (Mathematical Thinking), followed by MGF1131 (Mathematics in Context).

Note: Starting Fall 2024, MGF1107 and MGF1106 will no longer be offered. Students' placement in first math course under the pathway may vary based on alternative placement criteria.

Alternative Placement Criteria for Exempt & Non-Exempt

PATHWAYS

ALGEBRA THROUGH CALCULUS

MAC 1105 (3C) and MAC 1105L (1C)
College Algebra & College Algebra Lab or MAC 1106 (Through placement)

MAC 1147 (5)
MAC1140(3C)&MAC1114(3C)

MAC 2311(5C)
Calculus and Analytical Geom. I

MAC 2312 (4C)
Calculus and Analytical Geom. II

MAC 2312 (4C)
Calculus and Analytical Geom. III

STATISTICAL REASONING

MGF 1131 (3C)
Mathematics in Context

STA2023(3C)
Statistical Methods

MATHEMATICAL THINKING

MGF 1130 (3C)
Mathematical Thinking

MGF 1131 (3C)
Mathematics in Context

MAC 2233
Business Calculus
Pre-requisite: MAC 1105

MAD 2104 (3C)
Discrete Math
Pre-requisite: MAC 1140 or MAC1106

MAC 2103 (3C)
Elementary Linear Algebra
Pre-requisite: MAC 2311

MAP 2302 (3C)
Intro to Differential Equations
Pre-requisite: MAC 2312

ACCUPLACER QAS	
Scores	***Placement***
200-260	MAT0028, MAT0057
261	MAT1033, MGF1130, MAC1105 with MAC1105L
261-300	MGF1130, MAC1105, MGF1131, STA2023
276-300	Refer to ACCUPLACER AAF

ACCUPLACER AAF	
Scores	***Placement***
250-269	MAC1114, MAC1140, or MAC2233
270-279	MAC1147
280-300	MAC2311