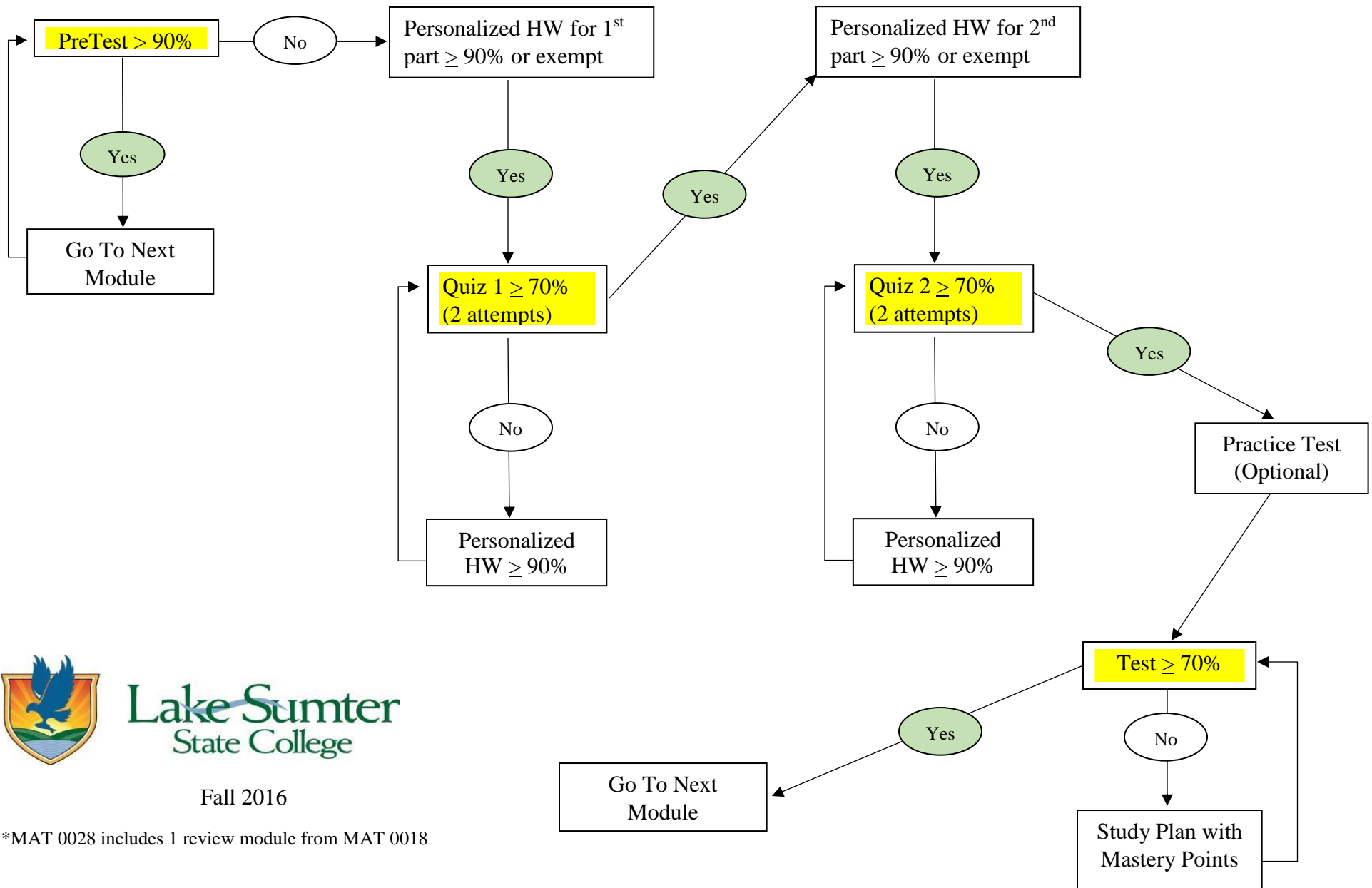


DEVELOPMENTAL MATH COURSE STRUCTURE

7 Modules for MAT 0018 – DEVELOPMENTAL MATH I

8 Modules for MAT 0028 – DEVELOPMENTAL MATH II*



Lake Sumter
State College

Fall 2016

*MAT 0028 includes 1 review module from MAT 0018

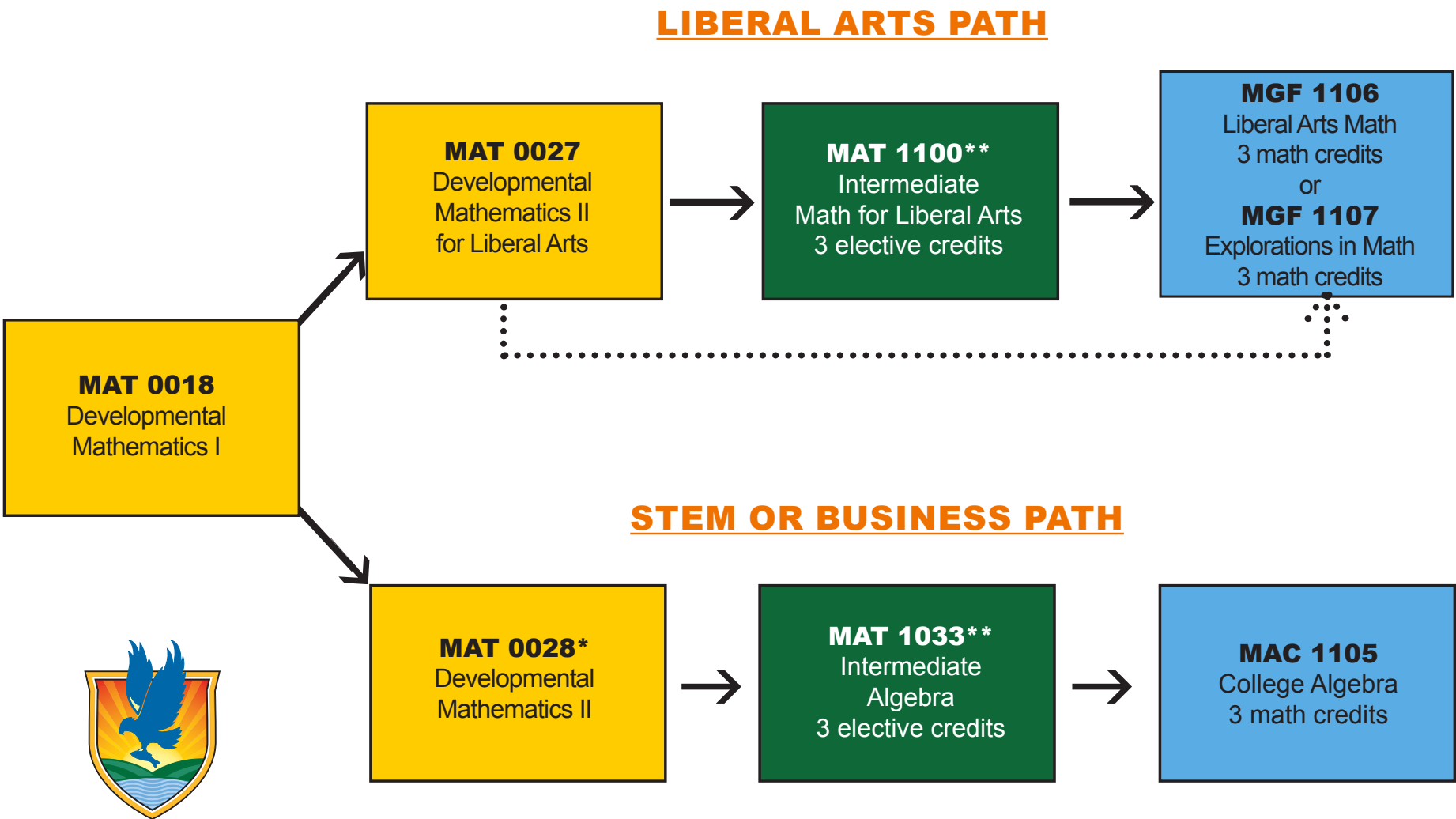
DO I NEED COLLEGE ALGEBRA?

Selected UCF programs are presented below.
You should always consult with an advisor to discuss appropriate math selections.

NO	YES
LIBERAL ARTS PATH	STEM or BUSINESS PATH
Use the link to check your specific desired program. http://catalog.ucf.edu/programs/degree-programs	
<ul style="list-style-type: none">Advertising - Public Relations, Radio/TelevisionArt (History track)CommunicationsCriminal JusticeEarly Childhood Development & EducationEnglishHistoryMusicNursing (prefer MAC 1105 at UCF)Political SciencePsychology (prefer MAC 1105 at UCF)Social SciencesSport and Exercise Science	<ul style="list-style-type: none">ArchitectureArt (selected tracks)BiologyBusiness (Accounting, Finance, Management, Marketing, Real Estate)ChemistryComputer ScienceEngineeringHealth Sciences - Pre Clinical TrackHospitality ManagementNursingPhysicsPsychology

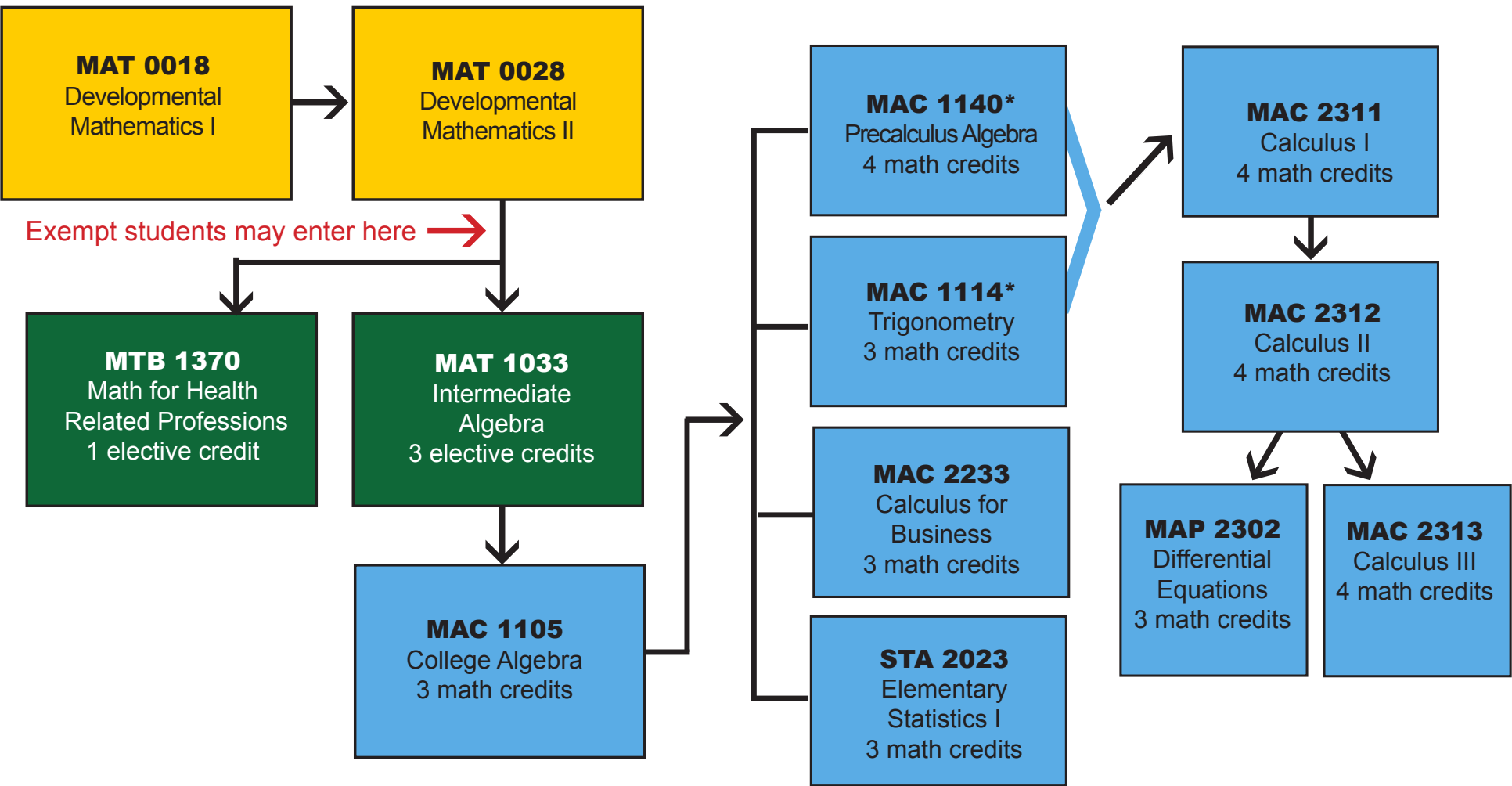
Based on UCF 2015/2016 Catalog

LSSC Mathematics Pathways



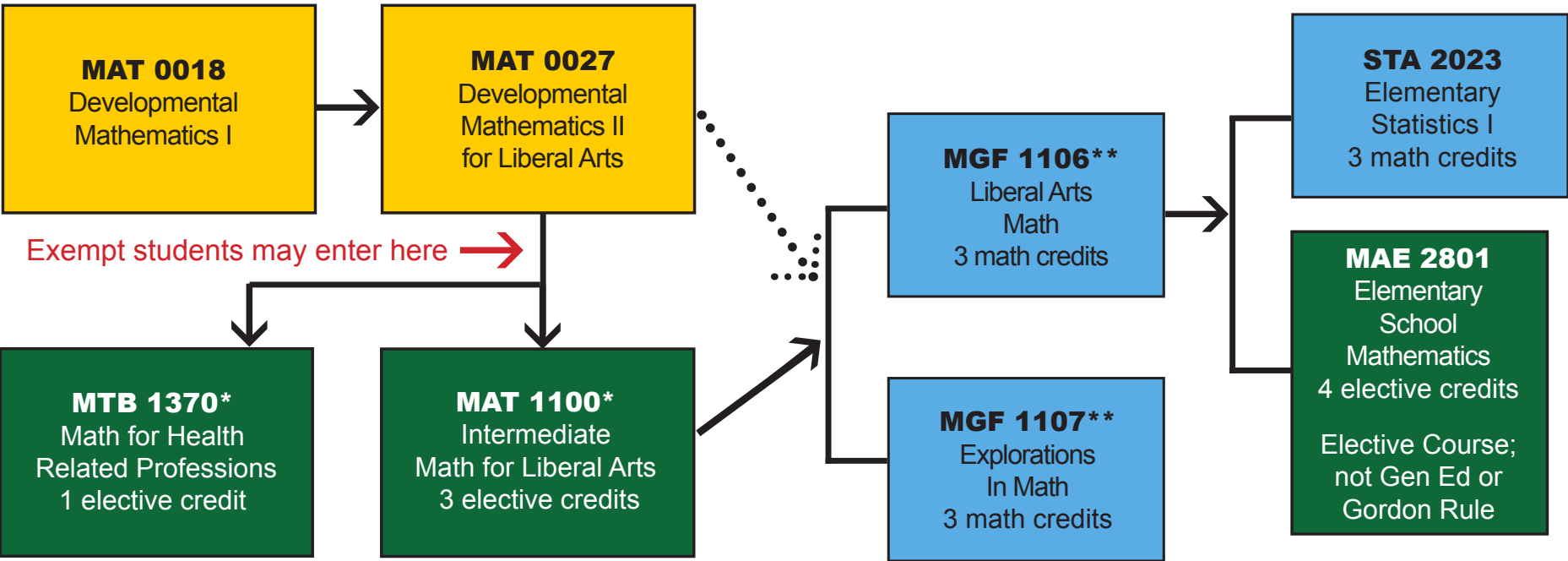
* Students who successfully complete MAT 0028 can take either MAT 1100 or MAT 1033.
** Exempt students may begin with either MAT 1033, MAT 1100 or MTB 1370. All students should meet with an advisor to discuss appropriate math selection based on intended university major.

STEM or Business Mathematics Pathway



* It is suggested that MAC 1140 be taken prior to MAC 1114. Both courses are required for MAC 2311.

Liberal Arts Mathematics Pathway



- * MAT 0028 is an alternative prerequisite for MAT 1100 and for MTB 1370
- ** MAT 1033 is an alternate prerequisite for MGF 1106 and MGF 1107



- Students seeking the Associate in Arts (A.A.) degree must successfully complete two general education math courses noted in blue above.
- All students should meet with an advisor to discuss appropriate math selection based on intended university major.



Campuses in Clermont, Leesburg, & Sumterville, Florida

Handouts for AMATYC 2016 Denver, Colorado

Session Title:
Emporiums, Redesigns, Pathways, & Calculators

Friday, November 18, 2016
10:15 am – 11:05 am

Presenters:
Alissa Sustarsic
Judy Stimpson
Natalie “Talie” Souders
Sybil Brown

American Mathematical Association of Two-Year Colleges
Annual Conference

Disclaimer:
“The contents of this presentation regarding the redesign of our classes using an Emporium model were developed under a grant from the Department of Education. However, those contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.”

Contacts

Faculty Name Email Typical Course Load	Redesign, Pathways & Emporium Roles
Alissa Sustarsic SustarsA@LSSC.edu Developmental Intermediate Algebra Calculus for Business Liberal Arts	<ul style="list-style-type: none"> ➤ Original Developmental Redesign Lead ➤ Original Intermediate Algebra Team Member ➤ Leesburg and Sumter Emporiums Liaison <ul style="list-style-type: none"> • Developmental Lead • Intermediate Algebra Lead
Judy Stimpson StimpsoJ@LSSC.edu College Algebra PreCalculus Trigonometry Calculus	<ul style="list-style-type: none"> ➤ Original College Algebra Redesign Lead ➤ Original Intermediate Algebra Team Member
Natalie "Talie" Souders SoudersN@LSSC.edu College Algebra Trigonometry Liberal Arts Intermediate Math/non-STEM	<ul style="list-style-type: none"> ➤ College Algebra Lead ➤ South Lake Emporium Liaison <ul style="list-style-type: none"> • Developmental Lead • Intermediate Algebra Lead ➤ Non-Stem Pathways Team Member
Sybil Brown BrownS@LSSC.edu Developmental/non-STEM College Algebra Statistics	<ul style="list-style-type: none"> ➤ Original Redesign Coordinator ➤ Emporium Liaison Coordinator ➤ Non-Stem Pathways Team Member

LSSC Courses and Calculator Requirements

Course Name	Course #	Sample Content	Credits
No Calculator			
Developmental Math I	MAT 0018	<ul style="list-style-type: none"> Decimals, Fractions, Integers Solve Linear Equations Ratios, Rates, Proportions 	4
Developmental Math II	MAT 0028	<ul style="list-style-type: none"> Factor Polynomials (GCF, trinomials, special) Linear Graphing Equations & Inequalities Intro to Algebra – Polynomials, Exponents Solve Linear Equations Percents, Conversions 	4
Basic 4-Function Calculator			
Intermediate Algebra	MAT 1033	<ul style="list-style-type: none"> Solve Linear, Quadratic, Rational & Absolute Value Equations Factor Polynomials Graph Linear Functions Solve Linear Inequalities Simplify Expressions with Exponents, Radicals & Imaginary Numbers 	3
Scientific Calculator			
Developmental Math II for Liberal Arts	MAT 0027	<ul style="list-style-type: none"> Order of Operations Proportional Reasoning Solve Linear Equations Intro to Algebra (factoring, polynomials) Graph Linear Equations Problem Solving/Applications 	4
Math for Health-Related Professions	MTB 1370	<ul style="list-style-type: none"> Fractions & Decimals Dosage Calculations Conversions (temperature, time, metric) Body Surface Area I.V. Drip Rate 	1

Scientific Calculator continued			
Intermediate Math for Liberal Arts	MAT 1100	<ul style="list-style-type: none"> • Introduction to Sets • Geometry • Conversions (metric & English) • Order of Operations • Variation • Introduction to Probability • Measures of Center 	3
Liberal Arts Math	MGF 1106	<ul style="list-style-type: none"> • Sets • Symbolic Logic • Introduction to Statistics • Introduction to Probability • Geometry 	3
Explorations in Math	MGF 1107	<ul style="list-style-type: none"> • Graph Theory • Consumer Math • Non-base Ten Arithmetic • Voting Methods • Linear Regression 	3
College Algebra	MAC 1105	<ul style="list-style-type: none"> • Function Properties and Behavior Piecewise-Defined, Quadratic, Rational, Exponential & Logarithmic Functions • Inverse Functions • Absolute Value Inequalities • Direct, Inverse, & Joint Variation 	3
Elementary Statistics*	STA 2023	<ul style="list-style-type: none"> • Histograms, Frequency Tables • Measures of Center & Variation • Probability • Binomial Probability • Normal Probability • Confidence Intervals • Hypothesis Testing 	3
Elementary School Mathematics	MAE 2801	<ul style="list-style-type: none"> • Sets of Numbers • Geometry and Measurement • Learning Sequences • Error Patterns • Problem-Solving Techniques 	4

Graphing Calculator			
Calculus for Business	MAC 2233	<ul style="list-style-type: none"> • Continuity • Limits • Derivatives • Applications for Business 	
Trigonometry	MAC 1114	<ul style="list-style-type: none"> • Trigonometric Functions & Identities • Conditional Equations 	3
Precalculus Algebra	MAC 1140	<ul style="list-style-type: none"> • Polynomial & Rational Functions • Exponential and Logarithmic Functions • Systems (linear & non-linear) • Partial Fractions • Conics • Sequences & Series 	4
Calculus I with Analytic Geometry	MAC 2311	<ul style="list-style-type: none"> • Limits, Derivative, Continuity • Indefinite & Definite Integrals 	4
Calculus II with Analytic Geometry	MAC 2312	<ul style="list-style-type: none"> • Techniques of Integration • First-order Differential Equations • Parametric Equations & Polar Coordinates • Infinite Sequences & Series 	4
Calculus III with Analytic Geometry	MAC 2313	<ul style="list-style-type: none"> • Two & Three-Dimensional Vectors • Calculus of Vector Fields • Multiple Integration • Partial Derivatives 	4
Differential Equations	MAP 2302	<ul style="list-style-type: none"> • Solve Ordinary Differential Equations by Various Methods • Boundary Value Problems • Series Solutions to Ordinary Differential Equations • Use LaPlace Transforms • Linear Systems of Differential Equations 	3

*Students have the option of using a scientific multi-view screen calculator or a graphing calculator.