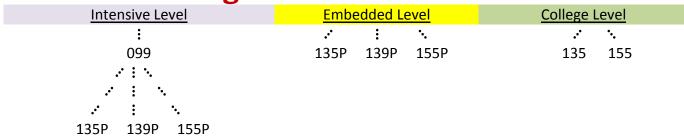
# Eastern Connecticut State University (ECSU) Embedded Mathematics Courses

# **Math Foundations Program**

Level	Name and Number of Math Course	Discipline	# of Credits (# of credits applied to 120)	<b>Enrollment Caps</b>
Intensive	MAT 099 – Algebra Essentials	All	3 (0)	20
Embedded	MAT 135P – Math for Liberal Arts Plus	non-STEM	4 (4)	25
	MAT 139P (formerly MAT 139) – Number Systems Plus	non-STEM	4 (4)	25
	MAT 155P – PreCalculus Mathematics Plus	STEM	5 (5)	25
College	MAT 135 – Math for Liberal Arts	non-STEM	3 (3)	35
	MAT 155 (formerly MAT 130) – PreCalculus Mathematics	STEM	4 (4)	30
	MAT 243 Calculus I	STEM	4 (4)	35

# **Math Foundations Program Flow Chart**



- Entry into MAT 135P, MAT 139P, and MAT 155P is based on initial placement or passing MAT 099
- Entry into MAT 135 and MAT 155 is based on initial placement or retaking the placement exam to try to place into these courses.

# **Mathematics Placement Information**

Level	SAT Math Range	ACT Range	Accuplacer Results		Intended Major or Certification	ECSU Math Course	# of Credits
			Elementary Algebra	College Math			(# of credits applied to 120)
Intensive	500 or less	1 - 17	Less than 45		All	MAT 099	3 (0)
Embedded	510 – 560	18 - 21	At least 45 and less than 75		All except Biochemistry, BIO, CSC, EES, MAT, Exploratory/Undecided STEM, ECE, EDU. Secondary Education students should enroll in the course appropriate for their intended major. non-STEM	MAT 135P	4 (4)
					Biochemistry, BIO, CSC, EES, MAT, Exploratory/Undecided STEM STEM	MAT 155P	5 (5)
	510 and above	18 and above	At least 45	At least 60	ECE, EDU, Liberal Studies with concentration in ENG, History/Social Sciences or Natural Sciences non-STEM	MAT 139P (formerly 139)	4 (4)
College	570 and above	22 and above	At least 75	Less than 60	All except Biochemistry, BIO, CSC, EES, MAT, Exploratory/Undecided STEM, ECE, EDU. Secondary Education students should enroll in the course appropriate for their intended major. non-STEM	MAT 135	3 (3)
	570 - 610	22 - 23	At least 75	Less than 60	Biochemistry, BIO, CSC, EES, MAT, Exploratory/Undecided STEM STEM	MAT 155 (formerly 130)	4 (4)
	620 and above	24 - 36	At least 75	At least 60	Biochemistry, BIO, CSC, EES, MAT, Exploratory/Undecided STEM	MAT 243	4(4)

## **Embedded Course Descriptions for MAT 135P and MAT 155P**

## MAT 135P - Math for Liberal Arts Plus

This course offers integrated just-in-time Intermediate Algebra support. Mathematics will be applied to solving practical problems in a variety of disciplines, enhanced by algebraic content and technology skills. Mathematical topics include voting theory, financial mathematics, linear programming, identification numbers, and statistics. Additional topics may include fair division. This course is for **non-STEM disciplines only** and thus cannot be used to satisfy the Precalculus Mathematics Plus (MAT 155P) or Precalculus Mathematics (MAT 155) prerequisite for Calculus I with Technology (MAT 243).

#### MAT 155P - PreCalculus Mathematics Plus

This course offers integrated just-in-time Intermediate through college algebra support. Topics include the study of functions, domain and range, building new functions through algebraic operations, composition of functions, and inverse functions. The course will also include the study of families of functions such as polynomial, rational, radical, exponential, logarithmic, and trigonometric functions. Specifically, students are expected to gain an understanding of algebraic notation, expressions, equations, inequalities and their use in describing and interpreting relationships, functions and function notation, proportional and inversely proportional relationships, and applications of periodic phenomena and trigonometric identities. The use and mastery of graphing technology is an essential aspect of the course. The course is designed for students majoring in STEM disciplines. May also be useful to other quantitative disciplines.

## Common Materials for MAT 135P and MAT 155P

Textbook

Course syllabi

Course content

Course formulas (formulas folder)

Graphing calculator assignments

Required 18 hours in the MAC

Summary of practice exercises

Provide chapter summaries

Instructor information

Common final exam

# **Informative ECSU Math Department Websites**

## **Math Foundations Program Information**

http://www.easternct.edu/mathematics/math-foundations-program/

## **Mathematics Placement Information**

http://www.easternct.edu/mathematics/math-placement-information-commencing-summer-2014/

## **MAT 135P Resources Page**

http://www.easternct.edu/mathematics/math-135p-math-for-liberal-arts-plus/

## **MAT 155P Resources Page**

http://www.easternct.edu/mathematics/math-155p-precalculus-mathematics-plus/

## **Contact Information**

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