Accelerate! Summer – Fall 2017

Accelerated math provides deep practice in fundamental skills that help you develop confidence and mastery. These courses have outstanding success rates and provide a strong preparation for future courses. *Important: strongly recommend the students to avoid taking Math and English the same semester – high volume of HW makes the load unbearable and diminishes the benefit of EACH class.*

Math Refresher (Math 412): Reviews basic math concepts before students take the Assessment Test or as preparation prior to retaking the Assessment Test. (0.5 unit)
CRN 10347 10/9-10/11 - 4)0pm – 7:00pm
CRN 10979 11/3 _ 4 – 7pm + 11/4 – 10:00am – 4:00pm

Math Boot Camp (Math 413): Reviews fundamental concepts to prepare for success in Math 400, 402, 411 and 235 (2 units). *Strongly recommended for potential Math 411 students.*
Session 1-CRN 80124: 8/14 – 8/18; 9:00am – 4:10
Session 2-CRN 80130: 8/18 + 8/21 – 8/24; 9:00 a.m.-4:10 p.m. *This session is strongly recommended to Math 411 and Math 235 students.*

Math Boot Camp 2 (Math 415): Reviews algebraic concepts to prepare for success in Math 240, 242, and Precalculus (Math 8A)
CRN 80131: 8/18 + 8/21 – 8/24; 9:00 a.m.-4:10 p.m.
CRN 80136 6/26 – 7/13 – STEM Academy

Accelerated Math Courses

Math 411: Integrated Pre-Algebra (7 units)
2 sections:
CRN 10341: MTWTh 2:30 – 4:05
CRN 10342: MTWth 9:45 – 11:20 (Coyote Valley campus)

Math 235: Integrated Algebra (10 units)
2 sections:
CRN 10315: MTWTH - 9:45 – 12:15 *Instructor: Jen Nari*
CRN 10330 MTTH – 10:30 – 1:50 (Coyote Valley campus) *Instructor: Elena Dachkova*

## MPS: Math 430 – (10 teaching hours) – 5 units

CRN 10354: MTWTh 8:40-11:10 (SS 206)

This class is designed to **balance** the Acceleration. It is designed for students who previously had difficulty with Algebra 1 (or failed it a couple of times). Extra teaching hours give extra support. **The cost for the class is the same as other Algebra 1 classes. (5 units)**

To learn more, see a counselor or email Elena Dachkova at edachkova@gavilan.edu.

Math 415-Boot Camp 2
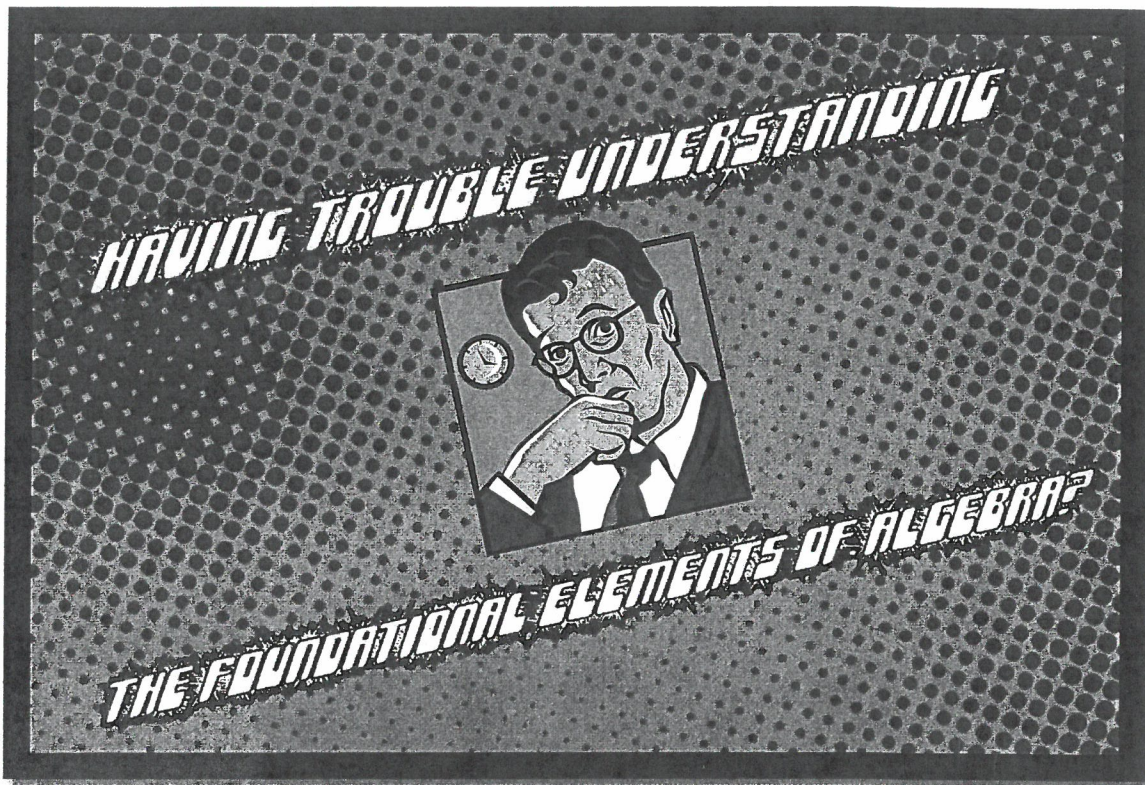
Preparation for
Math 240, 242, and Pre-calculus (Math 8A)
Math 415-CRN 80131
meets August 18th +21-24th 23, 9:00 a.m.-4:10 p.m.

Instructor: Svetlana Tuleneva

Need to brush up on your basic algebra before the start of the fall semester? The algebra boot camp may be the answer you've been looking for, helping you develop a solid understanding of algebraic concepts. The class will emphasize solving equations, graphing, factoring, and word problems.

If you are interested please register online or e-mail Elena Dachkova edachkova@gavilan.edu

BOOST YOUR CHANCE FOR SUCCESS!

REGISTER FOR MATH 413:

Math Boot Camp

Preparation for Math 400, 411, 402, 430, and Math 235

TWO sessions to choose from!

Session 1: August 14th - 18th (CRN: 80124)

Instructor : Eric Medina

OR

Session 2: August 18 + 21 - 24 (CRN: 80130)

Instructor : Elena Dachkova

9:00 a.m. – 4:10 p.m.

Get ready for math!
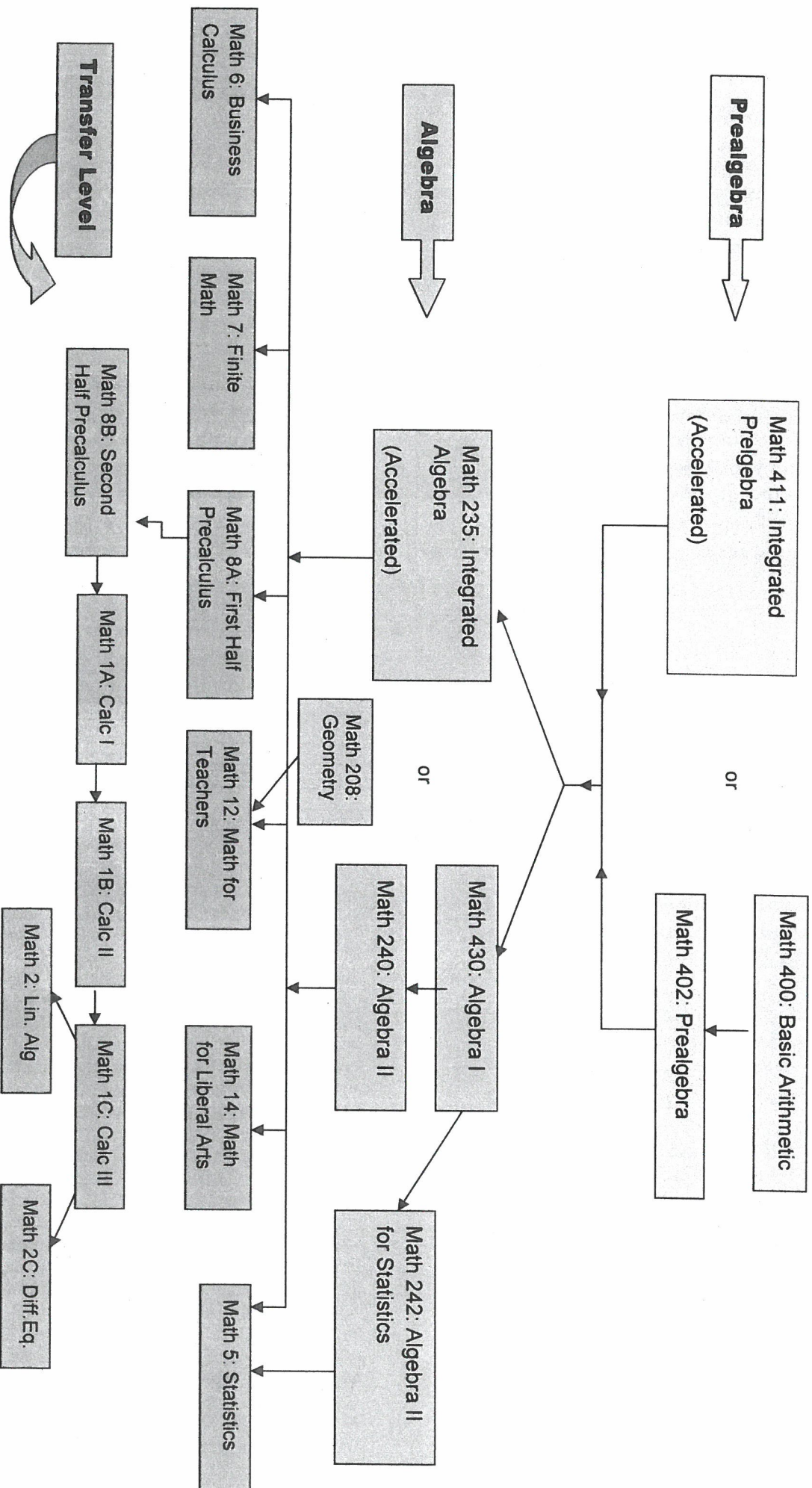## Enroll in Math Boot Camp!

Are you frustrated with fractions?
Do you find percents problematic?
Do you struggle with signed numbers?
Are word problems troublesome?
Want to brush up on your basic math skills?

**If you answered "*yes*" to any of these questions,
then the math boot camp is *definitely* for you!**

Students will develop a solid understanding of basic math concepts in this intensive class. If you are interested, please register online or email Elena Dachkova edachkova@gavilan.edu

Gavilan College

Flow Chart for Mathematics Courses

Prealgebra

Algebra

Transfer Level

Math 400: Basic Arithmetic

Math 402: Prealgebra

Math 411: Integrated Prelgebra (Accelerated)

Math 430: Algebra I

or

Math 235: Integrated Algebra (Accelerated)

Math 240: Algebra II

Math 242: Algebra II for Statistics

Math 208: Geometry

Math 12: Math for Teachers

Math 14: Math for Liberal Arts

Math 5: Statistics

Math 8A: First Half Precalculus

Math 8B: Second Half Precalculus

Math 7: Finite Math

Math 6: Business Calculus

Math 1A: Calc I

Math 1B: Calc II

Math 1C: Calc III

Math 2: Lin. Alg

Math 2C: Diff.Eq.

Course Content

Math 400: Arithmetic

- Perform basic operations with whole numbers, fractions, and decimals
- Perform basic operations with integers, signed fractions and decimals; utilize the rules for completing these operations
- Perform the conversions between percents, fractions, and decimals
- Solve basic percentage problems utilizing the proportional method
- Identify and apply correct strategies for solving real-life percent problems
- Solve percent problems and apply these strategies to solve real live problems
- Utilize proportion properties for solving application problems

Math 402: Prealgebra

- Perform basic operations with whole numbers, integers, fractions, and decimals without the aid of a calculator
- Analyze a variety of problems, decide on a correct method or strategy of solution, implement the strategy to solve the problem, and evaluate solution to determine if it is reasonable using estimation skills
- Simplify algebraic expressions and solve equations involving integers, fractions, and decimals without the aid of a calculator
- Develop and utilize math specific study skills and test taking strategies
- Set up and solve applied problems involving proportion, ratio, unit conversion, and percents
- Compute area, volume and perimeter of basic geometric figures
- Understand basic geometric properties involving lines, angles, and other geometric figures and use these properties to solve problems

Math 411: Integrated Prealgebra

- Perform basic operations with whole numbers, integers, fractions and decimals without the aid of a calculator
- Implement critical thinking strategies to solve real life problems and analyze/evaluate the solution with respect to the context of the problem
- Determine and implement an appropriate method of solution for real life problems
- Simplify algebraic expressions and solve linear equations involving integers, fractions, and decimals
- Set up and solve applied problems involving proportion, ratio, and percents
- Identify and analyze basic geometric shapes and be able to compute their perimeters, areas, and volumes

Math 430: Algebra I

- Simplify and evaluate algebraic expressions. Solve linear equations and inequalities in one variable including compound inequalities. Evaluate and solve formulas. Analyze and solve problems involving applications of linear equations and inequalities in one variable.
- Graph linear functions and inequalities in two variables. Determine slope, y-intercept, x-intercept and other information from either the graph, given the equation, or other information about the line. Utilize the graphs in problem solving. Solve systems of equations and inequalities in two and three variables algebraically, Solve systems of equations in two variables graphically. Analyze and solve problems involving applications of linear equations, linear inequalities, and systems of linear equations in two variables.
- Add/subtract, multiply and divide polynomials and numbers in scientific notation. Simplify exponential expressions using properties of exponents. Solve application problems in all of the above
- Identify and implement the appropriate strategy for factoring polynomials. Solve polynomial equations by factoring, set up and solve application problems involving polynomials and quadratic equations.
- Simplify, multiply, divide, add and subtract rational expressions and solve rational equations. Simplify complex fractions. Set up and solve rational equations for application problems.
- Analyze and translate verbal Expressions into Algebraic. Use symbolic language to name algebraic structures.
- Demonstrate proficiency with a scientific calculator

Course Content

Math 240: Algebra II	Math 235: Integrated Algebra
• Solve absolute value equations and inequalities • Analyze and solve radical, quadratic, exponential, and logarithmic equations, as well as systems of linear equations using matrices. Set up equations in all of the above to solve application problems, including investment, solution mixture, distance, population growth, and carbon dating. • Given a graph, equation or list, identify domain, range, points on the graph and whether a graph depicts a function • Graph quadratic, logarithmic, and exponential functions and be able to utilize the graphs in problem solving • Simplify and perform operations with radical expressions. Use properties of exponents and logarithms to simplify exponential and logarithmic expressions. • Identify, analyze and graph conic sections • Analyze and translate verbal expressions into algebraic. Use symbolic language to name algebraic structures.	• Simplify and evaluate algebraic expressions. Solve linear equations and inequalities in one variable. Evaluate and solve formulas. • Analyze, set up and solve quadratic, exponential, logarithmic, and rational equations • Analyze and solve problems involving applications of linear, quadratic, exponential, logarithmic, and rational functions • Graph linear, quadratic, logarithmic, and exponential functions and be able to utilize the graphs in problem solving • Simplify and perform operations with radicals. Analyze and solve radical equations. • Analyze and translate verbal expressions into algebraic. Use symbolic language to name algebraic structures.