Las Positas

Las Positas College 3000 Campus Hill Drive Livermore, CA 94551-7650 (925) 424-1000 (925) 443-0742 (Fax)

Course Outline for NMAT 264

MATH JAM FOR SLAM PREPARATION

Effective: Fall 2019

I. CATALOG DESCRIPTION: NMAT 264 — Noncredit

Math Jam for SLAM Prep is for students preparing for math courses in Statistics and Probability or Mathematics for Liberal Arts. Math Jam is a FREE noncredit program designed to help students prepare for their upcoming math class at a community college. Embedded are essential study and life skills to develop each student holistically, including career development. Students will be learning prerequisite algebraic and basic probability material with the goal of preparing them to be successful in their upcoming first-level transfer course of Statistics or Math for Liberal Arts class. It is strongly recommended that students taking this course be enrolled in Math 40: Statistics and Probability or Math 47: Mathematics for Liberal Arts at Las Positas College.

Grading Methods:

Pass/No Pass

Discipline:

Mathematics-Basic Skills: Noncredit

Noncredit Category

C - Elementary and Secondary Basic Skills

_	MIN	MAX
Total Noncredit Hours:	30.00	60.00

II. PREREQUISITE AND/OR ADVISORY SKILLS:

III. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Formulate short-term and long-term learning objectives for the course, based on their academic goal(s).
- B. Identify his/her individual areas of understanding and weakness in Statistics & Probability or Mathematics for Liberal Arts math
- Apply Statistics & Probability or Mathematics for Liberal Arts concepts at a higher level;
- D. Demonstrate the appropriate skills necessary to become a more productive, successful, and independent learner;

 E. Apply study skills and life skills that will improve the student's likelihood of succeeding in their academic goals, such as identifying his/her individual growth mindset, brain research, and learn personal time management, study skills, test taking and math anxiety strategies, etc.

IV. CONTENT:

- A. Students will identify their academic goal.
 1. Students will discuss their goal of preparing for their upcoming Statistics & Probability or Mathematics for Liberal Arts with an instructor and/or tutor.
 - Students will declare their goal by filling out an intent form and given personalized algebra, statistics, probability and other relevant math objectives to focus on based on their goal.
- B. Students will complete rigorous pre- and post-diagnostic exams.
 1. Results from pre-diagnostic exam will be used to identify his/her individual areas of understanding and weakness in the relevant algebra, statistics, probability and other math concepts.
- 2. Students will discuss the results with an instructor and/or tutor and create a personalized learning plan.

 C. Students will read, watch videos, attend workshops and study algebra, statistics, probability and other material based on their

- C. Students will read, watch videos, attend workshops and study algebra, statistics, probability and other material based on their personalized learning plan.
 D. Students will work through algebra, statistics, probability and other relevent problems.
 E. Students will learn the appropriate skills necessary to become more productive, successful and independent learners.
 1. Students will participate in Growth Mindset and learning skill discussions.
 2. Students will learn about free resources available on campus and on the internet to enhance their learning of mathematics.
 3. Students will actively participate in the course by practicing, interpreting, restating, and organizing material independently and under the supervision of instructors and/or tutors.
 F. Students will participate in classroom discussions and workshops around such topics as Growth Mindset. Brain Research, Financial
- F. Students will participate in classroom discussions and workshops around such topics as Growth Mindset, Brain Research, Financial Aid, Time Management skills, Test Taking Strategies, and dealing with Math Anxiety.

V. METHODS OF INSTRUCTION:

- A. Guest Lecturers such as workshops led by content experts around the campus on such topics as Growth Mindset, Brain Research, Time Management, Test Taking Skills, Math Anxiety, Career Development, etc.
 B. Audio-visual Activity such as watching videos, reading multi-media textbook, working problems out in steps, etc.
 C. Individualized Instruction such personalized instruction provided to the student by the instructor and/or tutor
 D. Classroom Activity such as instructor and/or tutor led discussions, workshops, etc.

VI. TYPICAL ASSIGNMENTS:

A. In Class

- Complete a Math Jam Pre- and Post-Survey, used to analyze student needs and effectiveness of the program.
 Identify individual goal for the course by completing the Participant Goal Sheet. For most participants, their goal is to either prepare to be successful in their upcoming credit Statistics class or to prepare to be successful in their upcoming credit Math for Liberal Arts class
- Complete a rigorous diagnostic pre- and post-test that will be used to personalize the learning for Math Jam. Customize Study Plan of the math content based on the diagnostic pre-test and the individual goals for the course.
- 5. Work independently and in collaboration with other students, supported by the instructor and/or tutors to master the algebra statistics, probability, and other relevant math concepts.
- Students will read, watch videos, attend workshops and study algebra statistics, probability, and other relevantmaterial based on their personalized learning plan.
- B. Smart Shops
- 1. Classroom discussions around such topics as Growth Mindset, Brain Research, Financial Aid, Time Management skills, Test Taking Strategies, Career, Development, and dealing with Math Anxiety.

 C. Homework - students will be encouraged to continue work outside of class each day towards the following:
- - 1. Mastery of algebra statistics, probability, and other relevant concepts
 2. Developing study and life skills that will improve the student's likelihood of succeeding in their academic and career goals.

VII. EVALUATION:

Methods/Frequency

A. Exams/Tests

Students will take a pre- and post- test.

Students will monitor their progress through their personalized plan under the supervision of instructors and/or tutors by taking daily quizzes

C. Class Work

Attendance will be recorded hourly

Students will monitor their progress through their personalized plan under the supervision of instructors and/or tutors by completing daily homework

VIII. TYPICAL TEXTS:

- Rockswold, Gary, and Terry Krieger. Beginning and Intermediate Algebra. 4th ed., Pearson/Addison-Wesley, 2018.
 Blitzer, Robert. Introductory and Intermediate Algebra. 5th ed., Pearson, 2017.
- 3. Martin-Gay, Elayn. Beginning and Intermediate Algebra. 6th ed., Pearson, 2016.
- 4. Excerpts from the assigned textbook of the first-level transfer credit Statistics class or Math for Liberal Arts class to support preparation for this course.
- 5. Handouts and materials provided by instructors and/or guest lecturers on appropriate prerequisite algebraic and trigonometric math concepts, Growth Mindset, Brain Research, study skills, time management, Career Development and/or test and math anxiety.

IX. OTHER MATERIALS REQUIRED OF STUDENTS: