JEFFERSON COLLEGE

COURSE SYLLABUS

MTH091

SUPPORT FOR SURVEY OF COLLEGE MATH

3 Credit Hours

Prepared by:
Constance Kuchar
January 2018

Dr. Robert Brieler, Division Chair, Math & Science
Dr. Shirley Davenport, Dean, Arts & Science Education

MTH091 Support for Survey of College Math

I.   CATALOG DESCRIPTION

   A.   Course pre-requisites/co-requisites: Reading Proficiency. Must meet math requirement by one of the following: High School GPA 3.0 or higher within six-seven years, GED scores of 165 - 174 within last five years, JC Non-STEM Math Readiness score of 20 - 49 within two years. Co-requisite: MTH131 Survey of College Math

   B.   3 semester credit hours

   C.   MTH091 Support for Survey of College Math is taken concurrently with MTH131 Survey of College Math to give students additional practice with the numerical, algebraic, and study skills necessary for successful, independent completion of Survey of College Math. (F, S)

   D.   Taken concurrently with MTH131 Survey of College Math in fulfillment of Mathematics Proficiency requirement; does not count towards degree requirements.

II.   EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

Expected Learning Outcomes	Assessment Measures
Develop and execute a plan for passing a Survey of College Math exam that incorporates planning, preparing for class, efficient practice, self-quizzing, comprehensive review, and self-reflection.	Pre-class activities Timely completion of homework Homework and quiz notebook Self- and peer-review activities Quizzes (group and individual)
Create strategies for recognizing types of mathematical situations and then choosing appropriate methods to work with them.	Pre-class activities Classroom activities Student-instructor conferences
Fluently apply various mathematical algorithms, pertinent to Survey of College Math.	Quizzes (group and individual) Online homework assignments Classroom activities
Identify and correct their own computational errors.	Group activities Self- and peer-review activities Homework and quiz notebook
Identify non-cognitive barriers that may impede their progress toward passing exams and develop effective strategies for avoiding or overcoming such barriers.	Class discussions Student-instructor conferences

III.	OUTLINE OF TOPICS

This course is designed such that the instructor will individualize some of the instruction to each student in the class, based on each student's specific needs. All students should demonstrate ability in the following areas, but the amount of time devoted to each area, and the number of activities and assignments for each area, will vary as needed.

A.	Rational numbers
1.	Operations with rational numbers
2.	Division by zero
3.	Order of operations

B.	Linear equations
1.	The distributive property
2.	Formulas
3.	Applications of linear equations
4.	Systems of linear equations

C.	Graphs
1.	Plot points
2.	Interpret graphs
3.	Introduction to functions
4.	Graph linear and nonlinear functions

D.	Measurement
1.	Dimensional analysis
2.	Unit conversion

E.	Consumer mathematics
1.	Calculate percentages
2.	Interest and annuity formulas

F.	Statistical reasoning
1.	Organize data
2.	Measures of central tendency
3.	Measures of dispersion
4.	Normal distribution
5.	Scatter plots

IV.	METHODS OF INSTRUCTION

A.	Whole-class discussions

B.	Small-group discussions

C.	One-on-one student-instructor conferences

D.   In-class activities

E.   Worksheets and handouts

F.   MyMathLab assignments

V.   REQUIRED TEXTBOOK(S)

A.   Blitzer, B.F., *Thinking Mathematically* (current edition). Boston: Pearson.

B.   MyMathLab Student Access Kit. Boston: Pearson.

VI.   REQUIRED MATERIALS (STUDENT)

A.   MyMathLab Access Code

B.   Calculator – scientific, graphing, or app, at instructor's discretion

VII.   SUPPLEMENTAL REFERENCES

A.   Student Solutions Manual (contained within MyMathLab)

B.   Study Plan (contained within MyMathLab)

VIII.   METHODS OF EVALUATION (basis for determining grade)

A.   Performance in Survey of College Math: 20 - 30%

B.   Pre-class activities: 10-20%

C.   Classroom Activities: 10-20%

D.   Individual/Group Quizzes: 10-20%

E.   Homework and quiz notebooks: 10 - 20%

F.   Attendance and Participation: 10%

G.   Grading Scale
90-100% = A
80-89% = B
70-79% = C
60-69% = D
Below 60% = F

IX.   ADA-AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Technology Center 101; phone 636-481-3169).

X.   ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College website, http://www.jeffco.edu).

XI.   ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.

XII.   OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.