

St. Petersburg College



COURSE SYLLABUS

Developmental Mathematics II

MAT 0028, Section # 2564

0520: Fall 2016

Tuesday and Thursday 5:05 pm-6:45 pm NM 105

View [How to Be a Successful Student](#) which provides the most current version of fluid information, such as the academic calendar.

WELCOME

Greetings Class,

Welcome to MAT 0028. I hope this will be an exciting, informative and productive mathematics class and semester.

I look forward to meeting all of you on Tuesday evening, August 16, 2016 in NM 105 at 5:05 pm.

Regards,

Mrs. Boera

INSTRUCTOR

Name: Susanne Boera

Email: boera.susanne@spcollege.edu

Phone: 791-2700

Office Hours: one half hour before class

Office Location: NM 111

Instructor Web Page: Copy/Paste Web address here (find yours at the [Faculty by Name](#) site)

ACADEMIC DEPARTMENT

DEAN

Name: Jimmy Chang

Office Location: SP/G - SA 215B

Office Phone Number: 727-341-4305

Email: chang.jimmy@spcollege.edu

ACADEMIC CHAIR

Name: Dr. Joy Moore

Office Location: Math Office

Office Phone Number: 791-2542

Email: moore.joy@spcollege.edu

WEBSITE

URL: www.spcollege.edu/math

COURSE INFORMATION

http://www.curricunet.com/stpetersburg/reports/course_outline_pdf.cfm?courses_id=7739

Course Description:

This is the second course in the college-preparatory two-course sequence (MAT 0018 and MAT 0028) designed to prepare students for college-level mathematics courses. This course is a study of the basic skills and concepts of basic algebra from the view of a college student who needs an understanding of basic algebra. Major topics include operations on signed rational numbers, simple linear equations and inequalities in one variable, operations on polynomials (including beginning techniques of factoring), integer exponents, brief introduction to radicals, introduction to graphing, applications, and other basic algebra topics. A minimum course grade average of C (minimum 70% accuracy) is required for successful completion. This course does not apply toward mathematics requirements in general education or toward any associate degree. Credit is only given for MAT 0028 or MAT 0022.

Course Objectives:

1. The student will utilize mathematical operations (addition, subtraction, multiplication, division, absolute value, and square root) on problems involving rational numbers by:
 - a. applying the order of operations to simplify algebraic expressions, including those with parentheses and integer exponents.

- b. applying the order of operations to evaluate algebraic expressions, including those with parentheses and integer exponents.
 - c. adding and subtracting rational expressions with monomial denominators.
 - d. simplifying, multiplying and dividing rational expressions.
 - e. converting terms involving fractions, decimals, and percents
 - f. simplifying radical expressions involving square roots only.
 - g. adding, subtracting, and multiplying radical expressions containing monomial radicands with square roots only
 - h. rationalizing denominators containing radical expressions with monomial radicands with square roots only.
 - i. converting between scientific notation and standard decimal notation.
 - j. converting units of measurement across measurement systems.
2. The student will apply mathematical operations on polynomial expressions by:
- a. adding, subtracting, multiplying, and dividing polynomial expressions (division by monomials only; excluding division by binomials).
 - b. factoring polynomial expressions using methods which include the Greatest Common Factor, grouping, trinomials, and difference of squares.
3. The student will apply algorithmic and algebraic processes to linear, literal and quadratic equations by:
- a. solving linear equations in one variable using manipulations guided by the rules of arithmetic and the Addition and Multiplication Properties of Equality.
 - b. solving literal equations for a given variable with applications (geometry, motion $[d=rt]$, simple interest $[I=prt]$).
 - c. solving quadratic equations in one variable by factoring.
4. The student will determine components and solution sets of lines and inequalities by:
- a. graphing linear equations using table of coordinate values, intercepts, and slope-intercept form.
 - b. identifying the intercepts of a linear equation.
 - c. identifying the slope of a line including the use of the following methods: the Geometric-Definition and Algebraic-Definition Slope Formulas, a provided graph, and a provided linear equation.
 - d. solving linear inequalities in one variable using manipulations guided by the rules of arithmetic, the Addition and Multiplication Properties of Inequality, and graphing the solution set on a number line.
5. The student will use problem-solving strategies by:

- a. solving proportional relationship problems, inclusive of ratios and rates.
- b. solving geometric problems (e.g. perimeter, area, square root, Pythagorean Theorem) with algebraic expressions.
- c. solving multi-step problems involving fractions, decimals, and percentages (including situations such as simple interest, tax, markups/markdowns, gratuities, commissions, fees, percent increase or decrease, percent error, and expressing rent as a percentage of take-home pay).

Prerequisites:

Appropriate score on the SPC mathematics placement test or MAT 0018 with a minimum grade of C

REQUIRED TEXTBOOK & OTHER RESOURCE INFORMATION

Required Textbook

ISBN: 9781259908293

You will be purchasing an ALEKS 360 subscription card containing a Student Access Code providing access to the ALEKS online learning environment and to the following electronic textbook (not a printed textbook):

Miller/O'Neill/Hyde: Prealgebra & Introductory Algebra, 1st Edition
Publisher: McGraw Hill, eBook

Note: Only ALEKS licenses purchased through the SPC bookstore are valid for 2 years. The license is valid for the listed text only. Licenses purchased through a different vendor are valid for the time frame stated by that vendor. This implies that if your ALEKS license is not purchased at an SPC bookstore at this time and you need to repeat this course for any reason, you may need to purchase a new ALEKS license at the time of that future repeated attempt of this course.

Required Technology

Reliable access to a computer and the internet is necessary for this course. You must also have the ability to either scan or take pictures of your work to submit electronically. For example, you may use a scanner to scan and save your written work to your computer and then upload your work to the dropbox. You may also use your phone to take a picture of your written work and save it as a .jpg and then upload your work to the dropbox.

ALEKS system requirements: http://www.aleks.com/support/system_requirements

Recommended Technology

You are allowed to purchase and use a calculator in this course during your completion of homework, module/unit testing, and exams. The calculator must be capable of performing only basic arithmetic, limited to only the following 6 arithmetic functions: addition, subtraction, multiplication, division, square root, and percent. The calculator must NOT be able to perform the Order of Operations because that is one of the skills students are strengthening in this course.

One such approved calculator model is the Texas Instruments Model TI-108 and is described on the following webpage <https://education.ti.com/en/us/products/calculators/elementary-calculators/ti-108/tabs/overview>.

View the [Textbooks](#) site

LEARNER SUPPORT

Early Alert

You are enrolled in a course where the Early Alert System is being used. This system allows your instructor to notify student support specialists of any issues that may affect your success as a SPC student. If you are contacted by a student support specialist then the two of you will be able to address your barriers to success. You will also be informed about campus and community resources available to you.

Tutoring

Your instructor is available for questions and assistance. You are strongly encouraged to post any questions that you have to the corresponding discussion area, in MyCourses, for each module.

Tutoring in math, reading, and writing is also available free of charge, on each of the main SPC campuses as well as online. For more information, please see the link below.

View the [On-Campus and Online Support](#) site

Accessibility Services

Accessibility Services at SPC wants to help you succeed. If you have a documented disability or think that you may have a learning or other disability and would like to request accommodations, please make an appointment with the Learning Specialist on your campus.

All students requiring special testing arrangements because of a documented disability must first coordinate with SPC's Accessibility Services Department and provide a current Accommodations Sheet to their instructor within the first two weeks of the course. Students accommodated by SPC's Disability Resources with special testing arrangements must schedule their test/exam with the Accessibility Services Department, and their instructor, at least one week in advance of upcoming testing dates. For more information, please see the link below.

View the Accessibility Services site

Additional Support Resources

View the [Academic Support](#) site

View the [Student Services](#) site

IMPORTANT DATES

Course Dates: Please see [Academic Calendar](#)

Drop Date: Please see [Academic Calendar](#)

Withdrawal Date: Please see [Academic Calendar](#)

Financial Aid Dates: View the [Financial Aid Dates](#) site

DISCIPLINE-SPECIFIC INFORMATION

In this course, you will use a computer program called ALEKS. ALEKS is a web-based, artificially intelligent assessment and learning system. ALEKS uses adaptive questioning to quickly and accurately determine exactly what you know and don't know in the course, and then provides instruction on the topics you are most ready to learn.

When you use ALEKS, you complete only the learning tasks that you need and not those somebody else needs. Everyone will have a different individual learning plan.

Since the subject matter is delivered by your interaction with the computer software, keep in mind this is neither self-paced nor an independent study class. It is guided, student-centered, computer delivered curriculum which fosters early completion of a course. This is not a self-paced or independent study class.

Log into ALEKS at www.aleks.com

ATTENDANCE

View the college-wide attendance policy included in the [How to Be a Successful Student](#).

The policy notes that each instructor is to exercise professional judgment and define "active participation" in class (and therefore "attendance"), and publish that definition in each syllabus.

Students are required to logon to MyCourses on a regular basis, complete all assignments on or before the due date/times, and to interact with your instructor and peers. Instructors will verify that students are in attendance each week during the first two weeks of class. **Students classified as "No Show" for both of the first two weeks will be administratively withdrawn.**

For this class, attendance is defined as not missing more than four classes in a semester.

Immediately following the 60% point of the term, each instructor will verify which students are actively participating in class. Students classified as not meeting the criteria for active class participation may be administratively withdrawn with a grade of "WF". **Active class participation for this class is defined as responding to emails, posting to the discussion board as required by your instructor, as well as completing all assignments by the required deadlines. Those students who do not complete Modules 1 - 5 in ALEKS (with at least a 70% on each module), Quizzes 1 - 5 in ALEKS, and the Midterm Exam as scheduled may be disabled from the course in ALEKS, classified as not actively participating, and are subject to being administratively withdrawn from class with a failing grade. Students unable to complete these requirements should notify their instructor immediately.**

GRADING

Students enrolled after the withdrawal deadline will receive a course letter grade based on the following grading scale (rounding shall be at the instructor's discretion):

Grading Scale: A = 90 - 100%, B = 80 - 89%, C = 70 - 79%, F or N = 0 - 69%

Grades of "I" (Incomplete) are not given in this course. If you do not complete the course by the scheduled final exam date, you will receive and "F" for the course.

*Note: An "N" (not complete) will only be given to those students who put significant effort into the course and comply with the attendance policy. UNDER NO CIRCUMSTANCES will a student receive a "W" grade after the withdraw deadline. Students on their third attempt cannot withdraw from the class after the first week.

Late Assignments and Make-Up Policy: All course work must be completed as scheduled. A grade of zero will be assigned to any course assignment not completed as scheduled.

ALEKS Pie - 20% of overall grade

ALEKS is integrated with a textbook to set up Intermediate Objectives/Topics based on Modules.

Students receive credit based on the number of goal topics completed out of the total number of goal topics assigned for each module. As you make progress in ALEKS, you will be automatically reassessed at regular intervals to check retention and provide review as needed. These Progress Assessments tend to focus on your recent learning history and are intended to check your retention of material recently learned. If the assessment comes at a time when you cannot concentrate, log off and return later. You may lose material from your pie on Progress Assessments; this is completely normal. Once you have reviewed and shown mastery on any objectives/topics that were removed from your pie, those objectives/topics will then be added back. Grades from ALEKS will be based on completing assignments accurately and on time. Your grade will be adversely affected if you are not on schedule. Module Pie grades will be posted to the Grades area in MyCourses after each corresponding due date. Your lowest module grade will be dropped at the end of the semester.

Hours per week on Aleks - 5 hours minimum- 10%

Pre-Quiz Check-up Questions - 0% of overall grade

For each module, you will be required to work out and solve specific questions prior to taking your quiz for that module. It is important that your work is done in an organized manner, clearly showing all steps, and your final answer. You must either scan or take a picture of your written work and upload it to the corresponding dropbox here in MyCourses. It is important that you review the feedback provided by your instructor before taking the corresponding quiz in ALEKS. Grading criteria is provided for each set of check-up questions. Your lowest Pre-Quiz Check-up Questions grade will be dropped at the end of the semester.

ALEKS Quizzes - 15% of overall grade

There will be 8 Quizzes in ALEKS; one for each module. These quizzes are timed and must be taken in class as scheduled. You will have only one attempt on each quiz. You are expected to take these quizzes without the use of a book, notes, or other resources. Only an approved calculator is allowed. Failure to take the quizzes by the scheduled due date/time will result in a grade of zero. Your quizzes will be graded automatically in ALEKS and you will then be able to review your submission and go over each question. Module Quiz grades will be posted to the Grades area in MyCourses after each corresponding due date. There are no make-ups given for missed quizzes. Your lowest quiz grade will be dropped at the end of the semester.

Midterm Review and Final Exam Review - 0% of overall grade

The Midterm Review and Final Exam Review will be completed in MyCourses. These reviews must be completed as scheduled. It is advised that you take each review multiple times in order to best prepare for the corresponding exam. You may use notes and your ebook while completing these reviews in preparation for the corresponding exam. However, you will not be permitted to use a book, notes, or any other resources other than an approved calculator, on the actual exams. You will have unlimited attempts on each review up until the deadline and only your highest score on each review will count toward your overall grade. It is recommended that you complete each review with at least a 75% or higher before you take the corresponding exam. Your reviews will be graded automatically in MyCourses and you will be able to review your submission to go over each question. Review grades will be automatically updated in the Grades area in MyCourses after each submission.

Midterm Exam - 25% of overall grade

The Midterm Exam will be completed in MyCourses and will cover material from Modules 1 - 4. The Midterm Exam is timed and must be taken in class as scheduled. No books, notes, or other resources are permitted. Only an approved calculator is allowed. Academic honesty policies will be strictly enforced. Failure to take the Midterm Exam as scheduled will result in a grade of zero. Your exam will be graded and automatically updated in the Grades area in MyCourses. There are no make-up exams.

Final Exam - 30% of overall grade

The Final Exam will be completed in MyCourses and will cover material from Modules 1 - 8. The Final Exam is timed and must be taken in class as scheduled. No books, notes, or other resources are permitted. Only an approved calculator is allowed. Academic honesty policies will be strictly enforced. Failure to take the Final Exam as scheduled will result in a grade of zero. Your exam will be graded and automatically updated in the Grades area in MyCourses. There are no make-up exams.

IMPORTANT: Students are responsible for finding an alternate means to complete the assignments should they experience hardware, software, or internet failure and/or problems. Deadline extensions will not be given. Instructors are unable to assist students with computer problems. Students should contact the SPC Helpdesk for problems with MyCourses and should contact ALEKS tech support for problems with ALEKS (see technical support section for contact information).

ASSIGNMENTS

In this course you will have recommended and required assignments in both ALEKS and MyCourses.

All course work/assignments must be completed as scheduled. Please refer frequently to the [Assignment List](#) and Calendar in MyCourses to maintain awareness of assignment due dates and testing dates. It is important that you are working on your assignments on a regular basis throughout each week in order to allow yourself time to address any questions that you may have and to complete your assignments as scheduled. A grade of zero may be assigned to any course requirement not completed as scheduled.

STUDENTS' EXPECTATIONS AND INSTRUCTOR'S EXPECTATIONS

The student is responsible for knowing all course policies listed in the syllabus.

REQUIRED INTERACTION

Students are required to check MyCourses email daily, carefully read and respond to all emails as requested, participate in class discussions, and complete assignments as scheduled.

Students may expect to receive replies to emails within 24 hours Monday - Friday and within 48 hours Saturday - Sunday and during scheduled College closings/holidays. Feedback and grades for assignments which are not automatically graded may be expected within 48 hours Monday - Friday and within 72 hours Saturday - Sunday and during scheduled College closings/holidays.

PARTICIPATION, CONDUCT, & NETIQUETTE

SPC has outlined expectations for student behavior and interaction for online discussions, email, and other forms of communication. View the Student Expectations in [How to Be a Successful Student](#).

ACADEMIC HONESTY

View the [Academic Honesty Policy](#)

COPYRIGHT

Copyrighted material within this course, or posted on this course website, is used in compliance with United States Copyright Law. Under that law you may use the material for educational purposes related to the learning outcomes of this course. You may not further download, copy, alter, or distribute the material unless in accordance with copyright law or with permission of the copyright holder. For more information on copyright visit: www.copyright.gov.

STUDENT SURVEY OF INSTRUCTION

The Student Survey of Instruction is administered in courses each semester. It is designed to improve the quality of instruction at St. Petersburg College. All student responses are confidential and anonymous and will be used solely for the purpose of performance improvement.

TECHNOLOGY

MINIMUM REQUIREMENTS

View the [MyCourses Minimum Technology Requirements](#)

Students should know how to navigate the course and use the course tools. Dropbox-style assignments may require attachments in either Microsoft Word (.doc or .docx), .pdf, or .jpg so that they can be properly evaluated. If an attachment cannot be opened by the instructor, students will be required to re-format and re-submit an assignment so that it can be evaluated and returned with feedback.

Minimum Technical Skills:

Reliable access to a computer and the internet is necessary for this course. You must also have the ability to either scan or take pictures of your work to submit electronically. For example, you may use a scanner to scan and save your written work to your computer and then upload your work to the dropbox. You may also use your phone to take a picture of your written work and save it as a .jpg and then upload your work to the dropbox.

MyCourses tutorials are available to students new to this LMS and are located at the beginning of the course. Most features on MyCourses are accessible on mobile devices, although it is recommended that you use a computer for quizzes, tests, and essay assignments.

ACCESSIBILITY OF TECHNOLOGY

View the [MyCourses \(Brightspace by Desire2Learn\) Accessibility Statement](#)

View the [ALEKS ADA Compliance and Accessibility Statement](#)

PRIVACY

View the [MyCourses \(Brightspace by Desire2Learn\) Privacy Statement](#)

[View the ALEKS Privacy Statement](#)

TECHNICAL SUPPORT

Technical support is available via the [Technical Support Desk](#).

ALEKS customer support is available at: http://www.aleks.com/support/contact_support_highered

INSTRUCTIONAL CONTINUITY PLAN - EMERGENCY PREPAREDNESS POLICY

The St. Petersburg College website at www.spcollege.edu is the official source of college information regarding the status of the institution. Other important information will be communicated via SPC Alert, local media outlets, and the college toll-free phone number 866-822-3978. All decisions concerning the discontinuation of college functions, cancellation of classes, or cessation of operations rest with the President or his/her designee. The College realizes that it is possible for a significant natural disaster to compromise SPC campus facilities sufficiently to disrupt the delivery of classes on campus/campuses for an extended period of time, and is planning ways our operations can continue following such an emergency.

So, in the event that a hurricane or other natural disaster causes significant damage to St. Petersburg College facilities, you may be provided the opportunity to complete your course work online. Following the event, please visit the college website for an announcement of the College's plan to resume operations.

Further, in the event of such a disaster, the instructor will continue using the Learning Management System (LMS) of MyCourses for continuation of all required learning and instructional activities in this course, including the issuing of graded online assignments and expectation of student completion of those graded assignments.

Therefore, in order to keep up with all activities in this course during and after a natural disaster, please plan to continue this course by maintaining online access to MyCourses in lieu of meeting in a classroom—possibly through duration of the course's regularly scheduled end date. We will finish this course in MyCourses, as directed by your instructor online, and your instructor will use all graded assignments—both online and formerly on-campus—to assess and issue your final letter grade for this course, as normally planned, despite occurrence of the natural disaster.