

This is a SouthArk Master Syllabus. The course syllabus distributed by the instructor may include additional requirements, must be followed by the student in the given term, and is considered to supersede the Master Syllabus.

Course Number

BSTD 0313

Course Title

Fundamentals of Arithmetic

Course Description

This course is an arithmetic review for students who need to improve their computational skills and to prepare them for elementary algebra, BSTD 0413. Topics include whole numbers, fractions, decimals, ratio and proportions, percent, measurement, and basic geometry. Passing the course with a C or better is a pre-requisite for taking BSTD 0413 (Elementary Algebra).

College Mission

South Arkansas Community College promotes excellence in learning, teaching, and service; provides lifelong educational opportunities; and serves as a cultural, intellectual, and economic resource for the community.

College Wide Student Learner Outcomes

Critical Thinking Responsibility Communication

ACTS Course **Program Course**

ACTS Outcomes

Program Outcomes

Course Learner Outcomes

CLO #	Course Learner Outcomes (CLO)	Unit Outcomes/ Competencies	ACTS Outcomes	Program Outcomes	Critical Thinking	Communication	Responsibility	Assessment
CLO 1	Calculate the solutions to problems involving whole numbers.	I			CT 2			Two problems embedded in the Departmental Final Exam
CLO 2	Analyze and compare computations involving fractions.	II			CT2			Two problems embedded in the Departmental Final Exam
CLO 3	Evaluate, compare and contrast computations involving decimals.	III			CT 2			Two problems embedded in the Departmental Final Exam
CLO 4	Analyze problems involving proportions and percents and develop proportional ratios from real-world examples.	IV			CT 2			Two problems embedded in the Departmental Final Exam
CLO 5	Convert between units of measurement and calculate geometric units.	V			CT2			Two problems embedded in the Departmental Final Exam

Unit Outcomes/ Competencies/ Objectives

- I. Whole Numbers. The student should be able to:
 1. Round to the nearest ten, hundred, or thousand.
 2. Solve equations by addition, subtraction, multiplication, or division.
 3. Solve applications using addition, subtraction, multiplication, or division.
 4. Evaluate exponential notation.

- II. Fraction Notation. The student should be able to:
 1. Find the prime factorization of a number.

2. Identify numerator and denominator, and write fraction notation.
3. Multiply a fraction by a fraction, and multiply a fraction by a whole number.
4. Use the test for equality to determine whether two fractions name the same number.
5. Multiply and simplify using fractions.
6. Solve equations by dividing fractions.
7. Find the least common multiple, or LCM, of two or more numbers.
8. Solve applied problems involving addition with fraction notation.
9. Subtract using fraction notation.
10. Convert between mixed numerals.
11. Multiply using mixed numbers.

III. Decimal Notation. The student should be able to:

1. Convert between decimal notation and fraction notation.
2. Add using decimal notation.
3. Multiply using decimal notation.
4. Divide using decimal notation.
5. Estimate sums, differences, products, and quotients.
6. Solve applied problems involving decimals.

IV. Ratio, Proportion, and Percent. The student should be able to:

1. Find fraction notation for ratios.
2. Give the ratio of two different measures as a rate.
3. Solve proportions.
4. Solve applied problems involving proportions.
5. Find lengths of sides of similar triangles using proportions.
6. Convert from fraction notation to percent notation.
7. Solve basic percent problems.
8. Solve applied problems involving percent.
9. Solve applied problems involving sales tax and percent.
10. Solve applied problems involving simple interest.

V. Measurement and Geometry. The student should be able to:

1. Convert from one American unit of length to another.
2. Convert from one metric unit of length to another.
3. Convert from one American unit of weight to another.
4. Convert from one unit of capacity to another.
5. Convert from one unit of time to another.
6. Find the perimeter of a polygon.
7. Find the area of a rectangle and a square.
8. Solve applied problems involving circles.
9. Find the volume of a rectangular solid using the formula $V = l * w * h$

Assessment Description(s)

A comprehensive final for all sections is given to students for the purpose of assessment. The departmental final is used for end of semester assessment and aligned with the outcomes of this course.

In order to complete the course and be eligible to move to Elementary Algebra, students *must* take the final exam and satisfactorily pass, as the exam acts as an exit test. Students who do not take the final exam will receive an F for the course, no matter their semester average.

Materials and Technological Requirements

Required: MyLabsPlus Student Access code for Basic College Mathematics, 11th edition, by Bittinger. Students have the option of buying the hard copy textbook if needed.

Supporting Materials: 1.5" or 2" three ring binder with loose leaf notebook paper, headphones, a calculator (TI-83 or TI-84 plus).

Course Access Link: To access assignments for this course go to www.southark.mylabsplus.com

Class Attendance Policy

Students are expected to attend all classes in which they are enrolled. If a student is absent from a class session, it is the student's responsibility to make arrangements to complete or make up any work missed. No make-up work for missed classes will be allowed without the approval of the instructor. Students who enroll late must assume all responsibility for work missed. Classes not attended as a result of late enrollment may be counted toward excessive

absences. Students not attending the entire class period may be counted absent for that period. An instructor may drop students with a grade of "WE" if students have been absent for an excessive number of days. Warning letters will be sent to the students advising them of the consequences of nonattendance and urging them to contact their instructors immediately. Excessive absences are defined as follows:

Regular Semester

Courses which meet once a week	2 absences
Courses that meet twice per week	3 absences
Courses that meet four times per week	5 absences

Summer Session

Courses that meet four times per week in a five week session	3 absences
Courses which meet two evenings per week in a 10 week session	3 absences

Students enrolled in special programs or individualized instruction should contact their program director/instructor regarding specific attendance requirements for the program/course. Some of the selective-admission, health-science programs have specific criteria regarding attendance. Students are encouraged to refer to program policies in these matters.

Jury Duty/Military/Official School Function

Scheduled absences are those that occur due to college-related activities or as a result of summons to jury duty or military duty. Classes missed as a result of scheduled absences will not be counted as excessive absences if the instructor is notified and provided documentation prior to the absence(s). Make-up work for scheduled absences will be at the discretion of the instructor.

In all instances, documentation must be provided to the instructor within 24 hours of receipt. Documentation should come from an appropriate party on letterhead or other official stationery with a signature and contact information. Documentation should list the corresponding dates of the leave.

Medical leave

For medical-related absences, documentation must include written notice from the treating medical professional documenting time needed off related to medical reasons and time student may resume classes. The medical reason does not need to be listed on the documentation; the documentation must include only that there is a medical reason, the amount of time the student needs to be absent, and the time the student should be able to return to classes. Students who elect to work at home while on excused leave must meet with their instructors to make arrangements to do so. Working on coursework while on medical leave is not a requirement but can be requested by students. If students request that they be allowed to work at home while on an excused leave, the instructor will make every reasonable effort to ensure that the student is able to do so.

For students who have a medical condition necessitating time off or accommodation:

- 1) They may work at home on assignments if they choose to if on medical leave approved by a medical professional
- 2) Receive appropriate accommodations related to coursework (i.e., excused from labs with potentially harmful chemicals, have a larger desk, etc.)
- 3) Resume their studies where they left off once they return to classes
- 4) Be allowed to make up any missed work related to medical leave
- 5) Receive incompletes on their transcripts until coursework is completed, according to the incomplete grade contract.
- 6) Be given a reasonable time frame in which to complete missed coursework

Academic Honesty Policy

Students enrolled at South Arkansas Community College are expected at all times to uphold standards of integrity. Students are expected to perform honestly and to work in every way possible to eliminate academic dishonesty. Academic dishonesty includes cheating and plagiarism, which are defined as follows:

- Cheating is an attempt to deceive the instructor in his/her effort to evaluate fairly an academic exercise. Cheating includes copying another student's homework, class work, or required project (in whole or in part) and/or presenting another's work as the student's own. Cheating also includes giving, receiving, offering, and/or soliciting information on a quiz, test, or examination.
- Plagiarism is the copying of any published work such as books, magazines, audiovisual programs, electronic media, and films or copying the theme or manuscript of another student. It is plagiarism when one uses direct quotations without proper credit or when one uses the ideas of another without giving proper credit. When three or more consecutive words are borrowed, the borrowing should be recognized by the use of quotation marks and proper parenthetical and bibliographic notations.

If, upon investigation, the instructor determines that the student is guilty of cheating or plagiarism, the following penalties will apply:

- The student will receive a penalty of no less than a zero on the work in question.
- The instructor will submit a written report of the incident to the Vice President for Learning
- The Vice President for Learning will determine whether further disciplinary action will be taken.
- All decisions may be appealed for review through the college's Academic Appeals procedure.

Equal Opportunity-Affirmative Action Statement

South Arkansas Community College does not discriminate on the basis of age, race, color, creed, gender, religion, marital status, veteran's status, national origin, disability, or sexual orientation in making decisions regarding employment, student admission, or other functions, operations, or activities.

Library Services

Library Homepage: <http://southark.libguides.com/homepage> Library Contact: LibraryStaff@southark.edu or 870.864.7115

Procedures to Accommodate Students with Disabilities:

If you need reasonable accommodations because of a disability, please report this to the Vice President of Student Services with proper documentation. . VPSS Contact: 870.875.7262

The Early Alert System

In an effort to ensure student retention and success, South Arkansas Community College employs an Early Alert System to identify and support at-risk students as soon as possible in a given semester. The intent of Early Alert is to provide this assistance while there is still time to address behaviors or issues that have the potential of preventing students from completing their courses and degree plans. Students referred through the Early Alert System will be required to work on a corrective action plan with their student advising coach and to include attendance accountability and mandatory academic tutoring either in the academic division or in the Testing and Learning Center (TLC).

Once the Student Advising Coach has met with the referred student, and again when the student has met the prescribed corrective actions, the coach will update the Early Alert System so that the instructor is kept informed of the progress in resolving issues.

Behavioral Review Team

At South Arkansas Community College (SouthArk), we are committed to proactive leadership in student wellbeing and campus safety. By focusing on prevention and early intervention with campus situations that involve any person experiencing distress or engaging in harmful or disruptive behaviors, the BRT will serve as the coordinating hub of existing resources to develop intervention and support strategies and offer case management. Students, faculty, staff, and campus guests are encouraged to report any person on campus who is a concern. BRT Contact: 870.875.7262 BRT@southark.edu

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