Prealgebra and Basic Geometry (MTH 0900) is a developmental course designed to help students develop the math and study skills that will improve their chances of being successful in subsequent required math courses. MTH 0900 carries 0 credit hours toward the requirements of any degree or certificate. It is a prerequisite course for MTH 1000 and MTH 1040. Grading for MTH 0900 is Pass/Fail/In Progress.
The prerequisite for enrollment in MTH 0900 is the successful completion of MTH 0800 (Pass) or indicative score on the COMPASS Mathematics Placement Test.

The textbook and HLS licensed software are available together at all CSM College Store locations.
If the book is purchased elsewhere, the software license MUST be purchased directly from Hawkes Learning Systems – www.hawkeslearning.com. (The software license is NOT transferrable, but can be used for more than one semester by the original owner.)

Other required materials: Three-ring binder with dividers and paper
Pencils
Scientific calculator. (A calculator with fractional notation is recommended. The TI-83 or TI-84 calculator is appropriate, but NOT required. Cell phone calculators are NOT permitted for use in classroom or testing center.)

Recommended materials: Flash/thumb drive (if data will be moved between computers)
Headphones if you will be using computers in CSM labs

Important dates include:
ALL FRIDAYS ~ CSM campuses close at 1:30 pm on Fridays May 28 – July 30
May 29 - 31 ~ CSM campuses close for Memorial Day observance
June 16 ~ Summer I deadline for changing enrollment status to Audit or Withdrawn
June 30 ~ Last Day of class for Summer I

Class specific information regarding any emergency closing will be announced through WebCT unless instructor establishes an alternate plan.

Though math can be challenging, students who commit themselves to active participation often discover that it can also be very rewarding.
Grade Determination
The student in MTH 0900 will earn a grade of **PASS (P)**, **FAIL (F)**, or **In Progress (IP)**. Grading in MTH 0900 uses a point system. To earn a **P**, by demonstrating mastery of the material, a student must accumulate **at least** 528 points (80% of the course points), based on these assigned point values for the indicated assignments:

- 8 HLS Chapter Reviews (on computer) 20 points each 160
- 3 Unit Exams 100 points each 300
- Final Exam 200 points 200

Total: 660

A student who does not meet the requirement to earn a **P** will earn an **F** unless the instructor determines that the student has met the requirements to earn the **IP** grade by demonstrating consistent effort and measurable achievement throughout the semester, as well as meeting the requirement of being absent for no more than one class meeting.

Any student who earned an **IP** in the previous semester must meet with the instructor after the first class to discuss the **IP** contract.

Any student who abandons the course without officially withdrawing or changing enrollment status to audit will earn a grade of "**F**." If the student stopped attending class at or before the midpoint of the semester, the grade of "**FX**" will be used according to college policy.

Attendance
Regular attendance plays a major role in your success in any math class. You are taking this course to improve your understanding of mathematics and prepare yourself for more advanced courses. *Experience has shown that those students who do not attend classes regularly are not successful in the course.* You are expected to attend every class and to stay for the entire class period. Attendance will be taken during every class. If you arrive more than 10 minutes late or leave class early, you could be regarded as absent from that class. Should an emergency arise which requires you to miss class or to be late or leave early, it is your responsibility to confer with your instructor. **If you are absent two times, you must have a conference with your instructor before your instructor can resume grading your work.**

Disabilities and Special Needs
Share your accommodation plan for meeting special needs with your instructor before the second class session. If you do not have an accommodation plan your instructor is not permitted to make any adjustments for you. Contact the ADA coordinator immediately if you think you may be a candidate for an accommodation plan.

LAPL: Ms. Glennis Daniels-Bacchus 301-934-7614
MTH 0900 Prealgebra and Basic Geometry
Course Description and Objectives

Students enrolled in MTH 0900 review arithmetic properties and the order of operations through the study of signed numbers (integers, decimals, and fractions), variable expressions (including algebraic fractions), basic factoring, and the solution and graphing of linear equations. Basic geometry is introduced through the use of area and perimeter. Assignments throughout the course focus on the development of communication skills, problem solving skills, and effective study habits, especially as they relate to the study of mathematics.

MTH 0900 classes meet on campus for instruction and assessment as scheduled each week. Between classes students complete assignments from the Hawkes Learning Systems (HLS) software.

The Hawkes Learning System (HLS) software product is an important tool used in MTH 0900. The Chapter Review “Certify” section for each chapter provides assessment and feedback as well as tutorial assistance in preparation for exams. STUDENTS MUST COMPLETE THE REQUIRED HLS CHAPTER TESTS ON CAMPUS UNLESS THEY HAVE INTERNET ACCESS AND ACCESS TO A COMPUTER THAT SUPPORTS THE HLS SOFTWARE AT ANOTHER LOCATION.

Students completing the course successfully should be able to:

- Use effective study habits to develop a better understanding of mathematical concepts and improve their use of mathematical skills.
- Apply mathematical skills to address a variety of problems with multiple operations and signed numbers, including fractions and decimals.
- Demonstrate how mathematical operations model relationships between quantities by converting English phrases to algebraic expressions, and word problems to equations that represent the problems.
- Communicate about mathematics orally and in writing using appropriate vocabulary.
- Demonstrate increased self-confidence and perseverance with mathematics.

It is imperative that students complete all the objectives of this course successfully in order to move on to the next level of mathematics.

Students taking developmental math courses are sometimes frustrated that they are not having the same success in math as in other courses. They often become more successful when they understand that not all subjects should be studied in the same way, and begin to apply effective study habits for math. The assignments in this course have been designed to help students incorporate effective strategies for studying math into their weekly schedules. Completing all assignments will increase the likelihood of meeting the course objectives. Class participation is an important part of your learning. It is imperative that you ask questions about problems that gave you difficulty. When possible, ask questions before class by arranging to meet with your instructor, a tutor, or other students.

Auditing and Withdrawing

Students who are AUDITING this course are expected to complete all assignments and assessments, and to be regular in class attendance. Any student registered to audit the course must speak to the instructor about these requirements and complete an Audit Contract before the second class session.

If you choose to withdraw from the course or change to audit status, you must do so by submitting the necessary paperwork to the Registrar by the deadline noted with “Important Dates.” It is your responsibility to begin the withdrawal/audit process early enough to have it completed by this date.

If you do not complete the withdrawal process with the Registrar, you are still considered enrolled in the course even if you stop coming to class.

If you wish to change your status to “audit” you must meet with your instructor and complete an Audit Contract before submitting it to the Registrar. The contract will state your requirements to receive the grade “AU.” An audit form will be accepted only if it has been signed by the instructor and Chair of the MTH division. Again, it is your responsibility to begin this process early enough to allow time to have it completed by the deadline date.
Assignments and Assessments
Most class work and assignments will come from the required textbook and software. Your instructor may supplement these sources by providing you with additional materials. All exam questions will be based on material in the textbook and software. All work needs to be completed in a neat and organized manner. To receive full credit for work on assessments, all relevant work and steps must be shown. Assignments, as well as assessments, are indicated on the Course Schedule.

Assignments will not be accepted late. Assessments for this course include four exams. In the event that unusual circumstances cause you to be absent when a unit exam is administered, if you present your instructor with documentation of the circumstances, you will be given the opportunity to take a similar unit exam at the end of the semester, if necessary. This opportunity will be granted for only one exam per student.

Calculator Use for MTH 0900
The focus of this course is the development of confidence working with basic mathematic skills. Though liberal use of a calculator is permitted for most topics, you are encouraged to use your calculator to CHECK answers after doing the arithmetic without the use of a calculator.

Individual instructors reserve the right to prohibit the use a calculator for a particular assignment being completed in class. An announcement will be made to all students when the instructor wants to focus on the development of a particular skill for which the use of a calculator would not be appropriate.

The recommended calculator is a scientific calculator with buttons for operations, square and higher roots, squares and higher powers, fractions, and a π button. (This type of calculator can usually be purchased locally for under $15.00) Cell phones are not allowed to be used as calculators! Note: The TI 83 or 84 is not required for this course, but will be required for all courses above MTH 0900. The TI 84 (similar to the TI 83) is the calculator the author uses in the textbook in illustrations and descriptions of calculator use.

Policies and Regulations
Provisions of the Student Guide to Policies and Regulations included in the Student Handbook will be followed in order to maintain the optimal learning environment sought by the College of Southern Maryland. Please secure a copy of the handbook and read it. The following highlights address some of the CSM policies and regulations as they pertain to this course.

Drugs, Alcohol, and Tobacco
The College of Southern Maryland is a Drug-Free Zone. No trafficking or use of drugs or alcohol will be tolerated. Tobacco use is not permitted indoors and is permitted only in gazebos located around the campus.

Pagers and Cell Phones
No cell phone use will be allowed in the classroom or the computer lab at any time. Please turn cell phones off before entering class. Please discuss with your instructor any emergency need for the use of a pager to determine if an exception is appropriate.

Unauthorized Persons
It is the policy of the College of Southern Maryland that only those who are registered for the course are permitted in the classroom. Children, family members, and/or friends are not allowed in the classroom at any time for any reason.
Honesty
During exams, each student is expected to do his/her own work. Cheating will not be tolerated. Violators of this policy will be reported and disciplined accordingly. Instructors are also bound by a code of academic integrity; your instructor has an obligation to uphold the standards established by CSM.

Some of the behaviors that are considered cheating are:
- Submitting any work as your own that has been done by another or with the help of another.
- Communicating with another student during a quiz or exam.
- Copying material from another student or other unauthorized source during a quiz or exam or for any assignment being graded. (When working with study groups has been recommended, the problems study group members complete together should not include those assigned that may be collected and graded unless authorized by the instructor. Collaborating on similar problems to review skills is appropriate.)
- Allowing another student to copy from your quiz, exam, or any assignment being graded.
- Using unauthorized assistance of any kind (notes, books, person, website, etc.) on any assignment being graded.
- Allowing someone to complete your work using the HLS software.
- Completing someone else's work using the HLS software.
- Providing or receiving a copy of a quiz or exam to be used in the course.
- Use of a cell phone or pager to transmit or receive information during a quiz or exam.

APPENDIX A

IP GRADE

The In Progress grade (IP) is a grade designed for use with developmental courses. A student who earns an IP will do so by demonstrating consistent effort and measurable achievement throughout the semester, as well as having excellent attendance. A student who is absent from class more than one time is not eligible to earn the IP grade. (Reminder: Arriving more than ten minutes late and/or leaving early may be considered “absent from class.”) A student earning IP will complete a contract with the instructor detailing the requirements the student will need to meet in the following (full) semester in order to pass the course.

NOTES: 1) Students repeating the course with an IP must enroll and pay tuition and fees when repeating the course. 2) IP is NOT a passing grade, and may be considered the same as the failing grade by those granting tuition reimbursement or “student” status (e.g. employers). 3) IP is recognized for one semester at CSM; if the student does not pass the course during the next full semester (Fall/Spring), the transcript will indicate F for the course grade. 4) A student can not earn IP more than one time for the same course.

APPENDIX B

ASSIGNMENTS

Study Habits
Students taking MTH 0900 may have already been exposed to some of the math skills and concepts in this course, but may not have developed a thorough understanding, or did not retain their skills. Therefore, several course requirements have been included to guide you in developing study/work habits that can help you with learning and retaining math skills. Completing all course requirements will increase the likelihood that you will be prepared to be successful in this and future math courses.

“Homework”
In order for you to be successful in this course, it is important that you take an active role in the learning process from the start. It is typically expected that students will spend about two hours of study outside of class for every hour in class. The course assignments are designed to guide you in using this time productively. “Homework” is often mistakenly defined as the “exercises” or “problems” at the end of a chapter or section in the textbook. Completing problems from the software is a vital part of your work outside the classroom, but it is only one part of your “homework.”
Textbook

Before coming to class, you should prepare by previewing the sections of the book to be used in class. This includes reading the objectives for each assigned section and making note of new vocabulary (often in bold print). You should look through the text of each section to determine how much preparation YOU need before class (for example: read through examples, read entire section, review prior skills.) After class, you are expected to carefully read the text and work through the examples in each section. This is an indispensable step in the learning process.

PRACTICE is a key to your success in this course. Many students find it helpful to work with other students in a study group. When working in a study group, you should focus on problems that are similar to those assigned so you can complete the graded assignment on your own. It is important that you ask questions in (or before) class about any problems that gave you difficulty.

Software

The Hawkes Learning Systems (HLS) software has been installed on campus computers in all libraries and learning labs for your use. The software that came with your textbook includes your non-transferable license number that will allow you to use the HLS program. (You may install the software on your own computer(s) for convenient use; check computer requirements in your textbook.) Each time you use the software (even on campus) you will need your personalized access code; directions for registering your license number to acquire your personalized access code are in your textbook in the Preface.

You may consider using the Instruct and Practice modes of the software in addition to your thorough reading of the section in the textbook. The Instruct mode features an audio option; if you will be using this feature on campus, headphones are recommended. The Practice mode provides you with instant feedback about the correctness of your response and offers tutorial assistance to help you learn from your errors. The level of difficulty in the Practice mode can be adjusted so you can build your confidence as you make progress and select more challenging questions.

Completion of the Certify section of an HLS lesson can be submitted for an “Assignment” grade instead of the corresponding exercises from the textbook. If you choose to submit this work for collected/graded assignments you must fulfill the same requirements as mentioned above: identify each section, number each problem, copy each problem, and display all relevant work in a neat and organized manner. You may also need to submit the certificate which indicates that you completed at least 80% of the work correctly. The HLS software is designed to reflect the mastery learning concept which means that you will be able to continue trying the assignment until you are successful. When your work is submitted with the certificate, you will be credited with 100% of the points for the assignment.

 Strikes are recorded for incorrect responses, and if you acquire too many, you will be sent out of the Certify mode to learn the skills you need before trying again. You can attempt to Certify as many times as necessary. The intent of using the software is to use the feedback you receive to help you work on these skills until your work is correct and you understand.

Again, the assignments required for this course have been designed to help you develop the skills you will need in order to be successful in the rest of your math courses. Take responsibility for your learning from the very start. Keep up with assignments, and get help when you need it. Attend all classes, and COMMUNICATE with your instructor regularly to get the most benefit from taking this course.

APPENDIX C

Exams

Exams will be used to assess student learning of skills taught in class and/or introduced through assignments. During any exam, only pencils and calculators are permitted. A cell phone is not permitted to be used as a calculator. Ordinarily, students may not leave the room during an exam. Students who do leave will be considered to have completed their work before they left, and their papers will be collected immediately. If an extreme emergency develops requiring you to leave, please talk privately with the instructor before leaving.

Four exams will be given during the semester – three unit exams and a cumulative final exam. In the event that unusual circumstances cause you to be absent and miss a unit exam, if you present your instructor with documentation of the circumstances, you will be given the opportunity to take a similar exam at the end of the semester. This opportunity will be granted for only one exam per student.
The HLS software that came with your textbook is a computerized tutorial that provides Instruction, Practice (with immediate feedback and tutorial assistance), and Certification (to assess your progress). It is recommended that you use this resource for tutorial assistance regularly in addition to using it for scheduled assignments. It is especially recommended that you complete the HLS software lesson, including any video lesson, if you must be absent from class.

The college provides free tutoring services for students enrolled in MTH 0800 and MTH 0900. Check the Learning Assistance Center’s web page (www.csm.edu/studentsuccess) to see the tutoring schedule for each campus. This schedule sometimes changes during the semester, so check periodically. You are strongly encouraged to use this service early in the semester. This service is limited and tutors often need to work with several students in a group.

The college has also subscribed to SMARTHINKING, a web-based 24-hour tutorial service. You can open an account to use up to twelve hours of free tutorial assistance by going to www.smarthinking.com. (Directions for use are at http://www.csmd.edu/studentsuccess/Tutoring/smarthinking.htm.)

Each campus library will have a set of video tapes of mathematics lessons that correspond to the course topics. The tapes can be viewed on campus. Ask at the front desk of the library (or the main office desk at the Waldorf Center) for the Developmental Math (MTH 0800-MTH 0900) videos. You will need to identify the course and the topic (not just a chapter/section number) to find the appropriate video lesson.

If you find you need additional help, you are encouraged to use a private tutor; it would be your responsibility to pay for the time of a private tutor. Your instructor may be able to suggest other resources. Talk with your instructor as soon as you feel the need for additional help.
# Course Schedule

- Practice assignments are from *Prealgebra*, fourth edition, by D. Franklin Wright. Assignments begin on the indicated pages. Notations "odd, eoo, eto" indicate the exercises assigned for homework practice as follows: 1-7 odd = 1, 3, 5, 7; 1-9 eoo (every other odd) = 1, 5, 9; 1-13 eto (every third odd) = 1, 7, 13. No notation indicates "all" as in 1-4 = 1, 2, 3, 4.

These assignments may not provide enough practice for you. Whether or not your instructor adds to the assignments, you may want to take advantage of additional practice problems in your textbook and/or on the HLS courseware.

<table>
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<th>Class</th>
<th>Class Content and Textbook Section(s)</th>
<th>Textbook Exercises</th>
<th>Notes</th>
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<td>Course Introduction, Whole Numbers</td>
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<td>(1.1-1.3 is meant to be an Independent Review section; class will include a brief overview to facilitate instruction for 1.4-1.5)</td>
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<td>Integers 2.1 – 2.3</td>
<td>1-101 eoo</td>
<td>HLS Chapter 1 Chapter Test “Certify”</td>
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</table>
| 6 | **Mixed Numbers, Ratios, and Proportions 4.4-4.6** *(Equations with fractions from 4.5 will not be included in assessments until Unit 3)*  
  *Decimal Numbers and Square Roots* *(Brief review of 5.1-5.2 concepts)*  
  *5.3 & 5.5-5.6* *(omit 5.4)*  | 357 | 1-55 eto  |
|   |   |   |
|   | 367 | 1-2; 3-45 eto; 47-48  |
|   | 379 | 1-4; 7-43 eto; 57-65 eoo  |
|   | 397 | 17-37 odd 57  |
|   | 429 | 1-29 eoo; 31-33; 37-55 odd; 71  |
|   | 443 | 1-43 eoo; 46 ;81-83  |
|   | 461 | 1-37 eto; 39-51 odd  |
|   | 495 | 1-31 odd;33-53 eoo; 61-71 odd  |
|   | 507 | 1-31 eoo  |
| 7 | **Decimal Numbers and Square Roots 5.7-5.8,** *(Unit 2 Exam Preparation, as time permits)*  
  **Percent 6.1-6.2** *(Unit 2 Exam Preparation, as time permits)*  | 521 | 1-19 eoo; 21-29 odd; 43-49 odd  |
|   | 533 | 1-3; 16-18  |
|   | 565 | 1-57 odd; 65-69 odd; 74  |
|   | 579 | 1-43 eto  |
|   |   | **HLS Chapters 5 and 6 Chapter Test “Certify”**  |
|   |   | **PREPARE note card (no larger than 5”x 8”) for use during Unit 2 Exam.**  |
| 8 | **Unit 2 Exam**  
  **Algebraic Topics I 7.1-7.5** *(Unit 3 Exam Preparation, as time permits)*  | 669 | 1-19 eto; 25-38; 39-43 odd; 45-52  |
|   | 677 | 1-39 odd  |
|   | 681 | 1-15 odd  |
|   | 693 | 1-4; 5-15 odd; 21-25 odd  |
|   | 703 | 1-10; 11-17 odd  |
|   |   | **HLS Chapter 7 Chapter Test “Certify”**  |
| 9 | **Graphing in Two Dimensions 9.1-9.3** *(Unit 3 Exam Preparation, as time permits)*  | 817 | 1-19 eto; 25-33 eoo; 34  |
|   | 833 | 1-63 eoo  |
|   | 851 | 1-13 odd  |
|   |   | **HLS Chapter 9 Chapter Test “Certify”**  |
|   |   | **PREPARE note card (no larger than 5”x 8”) for use during Unit 3 Exam.**  |
| 10 | **Unit 3 Exam Review**  |   | **Recommended:**  
  Review for Final Exam with HLS Chapter Tests “Practice” or “Certify”  |
| 11 | **Final Review**  |   | **PREPARE note card (no larger than 5”x 8”) for use during Final Exam.**  |
| 12 | **Final Exam**  |   |   |