

MATHEMATICS REQUIREMENTS AND SEQUENCING
BASED ON THE 2006-2007 UTK ARTICULATION/TRANSFER AGREEMENTS

ALL STUDENTS, INCLUDING SPECIAL STUDENTS, MUST MEET PSTCC REQUIREMENTS FOR MATH PLACEMENT.

DEVELOPMENTAL STUDIES READING REQUIREMENTS: A student who needs DSPR 0700 may take **DSPM 0700** only. A student who needs DSPR 0800 may take **DSPM 0700, DSPM 0800, or DSPM 0850** only. See **SIS+ R30**.

DEVELOPMENTAL STUDIES ENGLISH REQUIREMENT: A student who needs DSPW 0700 may take **DSPM 0700, DSPM 0800, or DSPM 0850** only. See **SIS+ R30**.

DEVELOPMENTAL STUDIES MATH REQUIREMENTS: Students under age 21 must have ACT scores and will be placed according to College policy. Students age 21 or older **MUST** take the ASSET placement test. An ACT math score of 19 or higher or an **ASSET Intermediate Algebra Test** score of 38 or higher is required in order to enroll in college-level math. Students with lower scores will be placed in appropriate developmental studies courses. All DSP math requirements must be completed before enrolling in any college-level math course. See **SIS+ Screens R22 and R30**.

ADVANCED MATH DEFICIENCY (A89): Students can remove a geometry/advanced math high school deficiency by taking **MATH 1130, 1530, 1710, or 1730**. **NOTE:** any course taken to remove a high school deficiency **CANNOT** also be used to meet degree requirements, but can be used for elective hours. Only students who graduated from a United States high school in 1989 or later and who are seeking an AA/AS degree or are transferring to any TBR or UT system school with less than 60 hours are required to satisfy **A89 requirements**.

****WEB-BASED READINESS QUIZZES:** Students who are concerned about their math skills should complete the appropriate web-based readiness quizzes at http://www.math.buffalo.edu/rur_index.html. Self-quizzes are available for Intermediate Algebra through Ordinary Differential Equations. These quizzes are for useful for self-assessment and review purposes only; they are **NOT** valid for placement.

GENERAL RECOMMENDATION: The Math Department **strongly recommends** that a student have **AT LEAST** a "C" in **all prerequisite math courses** before advancing to the next course in a sequence.

*******SAT SCORES:** These are the **recentered** scores for tests given **ON/AFTER 4/1/95**.*****

- Approved for TBR general education requirements & Removes HS A89 deficiency Credit hours stated after course title
- T Courses approved for UTK general education requirements

NUMBER (UTK NUMBER)	COURSE- CREDIT HR	PREREQUISITES	COMMENTS
DSPM 0700	Basic Mathematics-3	Placement determined by ACT or math placement score	May be taken with DSPR 0700, DSPW 0700, DSPW 0800, or DSPR 0800
DSPM 0800	Elementary Algebra-3	DSPM 0700 OR equivalent ACT or math placement score	May be taken with DSPW 0700 or 0800 or DSPR 0800 CANNOT be taken with DSPR 0700
DSPM 0850	Intermediate Algebra-3	DSPM 0800 OR equivalent ACT or math placement score	May be taken with DSPW 0700 or 0800 or DSPR 0800 CANNOT be taken with DSPR 0700
● T MATH 1010 (MATH 113)	Survey of Mathematics-3	HS Algebra I and II and ACT math 19 (SAT 460-470) OR DSPM 0850 or equivalent math placement score	A broad-based mathematics survey course
& T MATH 1530 (MATH 115)	Elementary Probability and Statistics-3	HS Algebra I and II and ACT math 19 (SAT 460-470); OR DSPM 0850 or equivalent math placement score	Non-calculus based statistics course. Recommended for nursing majors NOT transferring to UTK.

FOR ELEMENTARY EDUCATION MAJORS ONLY

NUMBER	COURSE CREDIT HR	PREREQUISITES	COMMENTS
● MATH 1410 (MATH 201)	The Structure of the Number System-3	HS Algebra I and II and geometry, ACT math 19 (SAT 460-470); OR DSPM 0850 or equivalent math placement score.	Recommended for prospective elementary education majors transferring to TBR schools.
● T MATH 1420 (MATH 202)	Geometry/Statistics-3		Recommended for prospective elementary education majors. Beginning 2005-2006 agreement, also take MATH 1010 or 1530.

FOR ENGINEERING, MATHEMATICS, COMPUTER SCIENCE and SCIENCE

The 2006-2007 Engineering Articulation Agreements are under development. Refer to math transfer equivalencies.

PSTCC	UTK
Both 1710 AND 1720	130
1730	130
1910	141
1920	142
2000	200
2010	251
2110	241
2120	231
1840	LD credit only

Most pre-engineering students need MATH 1910, 1920, 2000, 2110, and 2120, although **some may not need MATH 2000. Students should check their UTK articulation agreements carefully, as these requirements may have changed!** Mathematics, Statistics, and science majors probably do not need all of the courses listed above. **Students should check their UTK articulation agreements carefully, as these requirements may have changed!** Students who did not take precalculus with trigonometry in high school and/or have a math ACT score less than 26 may need to take a precalculus course before taking MATH 1910. ******(See Recommendations Below)**
BIOLOGY (GA49), CHEMISTRY (GA48) AND COMPUTER SCIENCE (GA32): need 1910–1920
MATHEMATICS (GA51): need 1910–1920; 2111
STATISTICS (ARTS AND SCIENCES) (GA68): need 1910–1920; 2050

NUMBER	COURSE CREDIT HR	PREREQUISITES	COMMENTS
● & MATH 1710 (Must take both 1710 and 1720 to equal 130)	Precalculus Algebra-3	HS Algebra I and II and ACT math 19 (SAT 460-470); OR DSPM 0850 OR equivalent math placement score ****(See Recommendations Below)	The successful completion of 1710 and 1720 prepares the student for MATH 1910. Students taking both 1710 and 1720 should take 1710 first.
● MATH 1720 (Must take both 1710 and 1720 to equal 130)	Precalculus Trigonometry-3	HS Algebra I and II, and ACT math 19 (SAT 460-470); OR DSPM 0850; OR equivalent math placement score ****(See Recommendations Below)	The successful completion of 1710 and 1720 prepares the student for MATH 1910. Students taking both 1710 and 1720 should take 1710 first.
● & MATH 1730 (MATH 130)	Precalculus: Algebra and Trigonometry-5	HS Algebra I and II, and ACT math 19 (SAT 460-470); OR DSPM 0850 OR equivalent math placement score ****(See Recommendations Below)	Intensive fast-paced review of precalculus and trigonometry which prepares the student for MATH 1910. MATH 1710 + MATH 1720 = MATH 1730

******RECOMMENDATIONS FOR MATH 1730:**

- +Students completing DSPM 0850 are **strongly encouraged** to take 1710 and 1720 (in that order).
- +Students with ACT math score of at least 19 (SAT 460-470), but who did not take precalculus with trigonometry in high school are **strongly encouraged** to take 1710 and 1720 (in that order)
- +Students with ACT math scores of 19-20 (SAT 460-490) who have taken precalculus with trigonometry in high school are **encouraged** to take 1710 and 1720 (in that order)
- +Students with ACT math score of at least 21 (SAT 500-510) who have taken precalculus with trigonometry in high school should be prepared for 1730, but may elect to take 1710 and 1720 (in that order) instead.
- +The following students may elect to take 1720 (without taking 1710)
 - +Students with ACT math score of at least 21 (SAT 500-510) who have taken precalculus with trigonometry in high school, but who need trigonometry review only.
 - +Students who have passed MATH 1730, but need to improve their trigonometry skills.
 - +Students who qualify for MATH 1910 (Calculus I) may take 1720 alone or concurrently with 1910.

MATH 1840 Math LD credit	Technical Calculus-3	MATH 1710 AND MATH 1720; OR MATH 1730	For engineering technologies majors only. Transfers to UTK as MATH LD credit only.
● T MATH 1910 (MATH 141)	Calculus I-4	HS Algebra I & II, geometry, precalculus with trig , and satisfactory ACT/SAT math scores; OR MATH 1730; OR MATH 1710 AND 1720 ****(See Recommendations Below)	For students majoring in science, math, engineering, math, or computer science. Students MUST have precalculus with trigonometry before taking MATH 1910.

******RECOMMENDATIONS FOR MATH 1910:**

- +An ACT math score of at least 26 (SAT 590-600) is recommended for this course (in addition to precalculus with trig).
- +Students with ACT math scores of 19-20 (SAT 460-490) or completing DSPM 0850 should take MATH 1710 **AND** 1720 or equivalent before enrolling in MATH 1910. A grade of C or better in both courses is **strongly recommended**.
- +Students with ACT math scores of 21-23 (SAT 500-550) should take either MATH 1730 **OR** MATH 1710 **AND** 1720 or equivalent before enrolling in MATH 1910. A grade of C or better in all courses is **strongly recommended**.

T MATH 1920 (MATH 142)	Calculus II-4	MATH 1910; grade of C or better is strongly recommended	
MATH 2000 (MATH 200)	Matrix Computations-1	MATH 2110 or consent of instructor	Check UTK articulation agreement to see if MATH 2000 is currently required for your major! Offered: Spring Only
MATH 2010 (MATH 251)	Matrix Algebra-3	MATH 1920	Offered: Spring Only
MATH 2110 (MATH 241)	Calculus III-4	MATH 1920; grade of C or better is strongly recommended	
MATH 2120 (MATH 231)	Differential Equations-3	MATH 2110; grade of C or better is strongly recommended	

FOR BUSINESS AND RELATED MAJORS
(GS 01, 2A, 08, 11, 15, 24, 90, 91, 92; **GS89 in 2005-2006 agreement**)

Students need to complete MATH 1630–1830 **OR** 1910–1920; **AND** MATH 2050. Students who did not take precalculus in high school and/or who have a math ACT score of less than 21 (for Finite Math) or 23 (for Basic Calculus) may need to take MATH 1130 before taking either MATH 1630 or 1830. ******(See Recommendations Below)**

ADVERTISING (GA19): need MATH 1630–1830 **OR** 1630–1910
AGRICULTURAL ECONOMICS AND BUSINESS (GS61) OR (GS87): need MATH 1630–1830; 2050
ECONOMICS (ARTS AND SCIENCES) (GA58): need MATH 1910–2050 **OR** 1830–2050
FRENCH (LANGUAGE AND WORLD BUSINESS) (GA88): 1830–2050 **OR** 1910–2050
HOTEL, RESTAURANT & TOURISM MANAGEMENT (GS39): need MATH 1630–1830; 2050
SPANISH (LANGUAGE AND WORLD BUSINESS) (GA89): 1830–2050 **OR** 1910–2050
PUBLIC RELATIONS (GA76): 1630–1830 **OR** 1630–1910; 2050 **(In 2005-2006 agreement)**
RETAIL AND CONSUMER SCIENCES (GS38): need 1630–1830; 2050
SPORT MANAGEMENT (GS98): need 1630–1830

NUMBER	COURSE CREDIT HR	PREREQUISITES	COMMENTS
● & MATH 1130 (MATH 119)	College Algebra-3	HS Algebra I and II and ACT math 19 (SAT 460-470); OR DSPM 0850 OR equivalent math placement score.	For students who did not take precalculus in high school and/or do not have required math ACT scores. Prepares the student for MATH 1630 or 1830. ****(See Recommendations Below)
● T MATH 1630 (MATH 123)	Finite Mathematics-3	HS Algebra I and II and precalculus and satisfactory ACT/SAT math scores; OR MATH 1130, 1710 or 1730 ****(See Recommendations Below)	Students needing BOTH MATH 1630 and 1830 are strongly encouraged to take MATH 1830 immediately after MATH 1130.
****RECOMMENDATIONS FOR MATH 1630: +An ACT math score of at least 21 (SAT 500-510) is recommended for this course (in addition to HS precalculus). +Students with ACT math scores of 19-20 (SAT 460-490) or completing DSPM 0850 must take MATH 1130 before taking MATH 1630.			
● T MATH 1830 (MATH 125)	Basic Calculus and Modeling-4	HS Algebra I and II, precalculus, and satisfactory math ACT/SAT scores; OR MATH 1130, 1710, or 1730 ****(See Recommendations Below)	Students needing BOTH MATH 1630 and 1830 should take MATH 1830 immediately after MATH 1130. NOT intended for science, engineering, math or computer science majors.
****RECOMMENDATIONS FOR MATH 1830: +An ACT math score of at least 23 (SAT 540-550) is recommended for this course (in addition to HS precalculus). +Students with ACT math scores of 19-20 (SAT 460-490) or completing DSPM 0850 take MATH 1130 before 1830.			
T MATH 2050 (STAT 201)	Introduction to Statistics-3	MATH 1830 OR MATH 1910	Calculus-based statistics course

FOR LIBERAL ARTS MAJORS
(GA 01, 8A, 09, 39, 40, 42, 43, 45, 47, 55, 70, 72, 75, 78, 84; GS 95, 96; **GA69 in 2005-2006 agreement**)

Students need to complete **two courses** from the following list: MATH 1010, 1530, 1630, 1830, 1910, 1920, 2050
 +The only courses on this list which **DO NOT** have college-level math prerequisites and/or ACT math scores of more than 19 are **MATH 1010, 1420, and 1530**. For all other courses, refer to description of the specific course.
JOURNALISM AND ELECTRONIC MEDIA (GA3A): Two courses from the following list: 1010, 1530, 1630, 1830, 1910
PRE-VETERINARY (GS97): 1830 **OR** 1910 and one other course from above list.

OTHER MAJORS

CHILD AND FAMILY STUDIES (GA6A): need MATH 1010 **AND** 1530
COMMUNICATION STUDIES (GA4A): need MATH (1010, 1630 **OR** 1830); **AND** (1530 **OR** 2050)
EXERCISE SCIENCE (GS1A): need (1630–1830 **OR** 1910–1920); **AND** (1530 **OR** 2050)
MEDICAL TECHNOLOGY (GA80): need 1530–1830 **OR** 1630–1830 **OR** 1910–1920
NURSING (GS37): need MATH 1830–2050
PLANT SCIENCES (GS84, GS85, GS86, GS93, GS94): need MATH 1630–1830 (**in 2005-2006 agreement**)
SOCIAL WORK (GA21): need MATH 1010
SOCIOLOGY (GA44): need MATH 1830–2050 **OR** 1910–2050
PREREQUISITES:
 +Students must take MATH 1130 before MATH 1630 if math ACT is less than 21 **OR** if they did not take HS precalculus.
 +Students must take MATH 1130 before MATH 1830 if math ACT is less than 23 **OR** if they did not take HS precalculus
 +Students must take MATH 1730 **OR** MATH 1710 **AND** MATH 1720 before MATH 1910 if math ACT is less than 26 or if they did not take HS precalculus with trigonometry.

This Chart Should Only be Used as a Supplement to Available Advising Resources jaa/9.2.2006