

COURSE DESCRIPTIONS

MA T-121	Algebra/Trigonometry I	3 (2-2)	Spring Summer
Prerequisites: MAT-003 ^S or BSP-4003 ^S , minimum grade P2S			
Corequisites: MAT-021 ^S			
<p>This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include the properties of plane and solid geometry, area and volume, and basic proportion applications simplification, evaluation, and solving of algebraic equations and inequalities and radical functions complex numbers right triangle trigonometry and systems of equations. Upon completion, students will be able to demonstrate the ability to use mathematics and technology for problem-solving, analyzing and communicating results.(2020 FA) This course has been approved to satisfy the following requirement(s):</p> <ul style="list-style-type: none"> • Mathematics Gen. Ed. course for A.A.S. and A.G.E. 			
MA T-143	Quantitative Literacy	3 (2-2)	Fall Spring Summer
Prerequisites: MAT-003 ^S or BSP-4003 ^S ; ENG-002 ^S or BSP-4002 ^S			
Corequisites: MAT-043 ^S			
<p>This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life.(2020 FA) This course has been approved to satisfy the following requirement(s):</p> <ul style="list-style-type: none"> • UGETC course for A.A., A.A. Teacher Preparation, and A.F.A. • Mathematics Gen. Ed. course for A.S. and A.S. Teacher Preparation • Mathematics Gen. Ed. course for A.A.S. and A.G.E. 			
MA T-152	Statistical Methods I	4 (3-2)	Fall Spring Summer
Prerequisites: MAT-003 ^S or BSP-4003 ^S ; ENG-002 ^S or BSP-4002 ^S			
Corequisites: MAT-052 ^S			
<p>This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results.(2020 FA) This course has been approved to satisfy the following requirement(s):</p> <ul style="list-style-type: none"> • UGETC course for A.A., A.A. Teacher Preparation and A.F.A. (visual arts and theatre) • Mathematics Gen. Ed. course for A.S. and A.S. Teacher Preparation • Mathematics Gen. Ed. course for A.A.S. and A.G.E. 			

MA T-171	Precalculus Algebra	4 (3-2)	Fall Spring Summer
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Prerequisites: MA T-003^S or BSP-4003^S, minimum grade P2S or MA T-121,
minimum grade CS

Corequisites: MA T-071^S

This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology. (2020 FA) This course has been approved to satisfy the following

 COURSE DESCRIPTIONS

MA T-271	Calculus I	4 (3-2)	Fall Spring Summer
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Prerequisites: MA T-172^S, minimum grade CL

Corequisites: None

This course is designed to develop the basic concepts of differential and integral calculus.

Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology. (2014 FA) This course has been approved to satisfy the following requirements: C-IDP 1006, C-IDP 1007, C-IDP 1008, C-IDP 1009, C-IDP 1010, C-IDP 1011, C-IDP 1012, C-IDP 1013, C-IDP 1014, C-IDP 1015, C-IDP 1016, C-IDP 1017, C-IDP 1018, C-IDP 1019, C-IDP 1020, C-IDP 1021, C-IDP 1022, C-IDP 1023, C-IDP 1024, C-IDP 1025, C-IDP 1026, C-IDP 1027, C-IDP 1028, C-IDP 1029, C-IDP 1030, C-IDP 1031, C-IDP 1032, C-IDP 1033, C-IDP 1034, C-IDP 1035, C-IDP 1036, C-IDP 1037, C-IDP 1038, C-IDP 1039, C-IDP 1040, C-IDP 1041, C-IDP 1042, C-IDP 1043, C-IDP 1044, C-IDP 1045, C-IDP 1046, C-IDP 1047, C-IDP 1048, C-IDP 1049, C-IDP 1050, C-IDP 1051, C-IDP 1052, C-IDP 1053, C-IDP 1054, C-IDP 1055, C-IDP 1056, C-IDP 1057, C-IDP 1058, C-IDP 1059, C-IDP 1060, C-IDP 1061, C-IDP 1062, C-IDP 1063, C-IDP 1064, C-IDP 1065, C-IDP 1066, C-IDP 1067, C-IDP 1068, C-IDP 1069, C-IDP 1070, C-IDP 1071, C-IDP 1072, C-IDP 1073, C-IDP 1074, C-IDP 1075, C-IDP 1076, C-IDP 1077, C-IDP 1078, C-IDP 1079, C-IDP 1080, C-IDP 1081, C-IDP 1082, C-IDP 1083, C-IDP 1084, C-IDP 1085, C-IDP 1086, C-IDP 1087, C-IDP 1088, C-IDP 1089, C-IDP 1090, C-IDP 1091, C-IDP 1092, C-IDP 1093, C-IDP 1094, C-IDP 1095, C-IDP 1096, C-IDP 1097, C-IDP 1098, C-IDP 1099, C-IDP 1100, C-IDP 1101, C-IDP 1102, C-IDP 1103, C-IDP 1104, C-IDP 1105, C-IDP 1106, C-IDP 1107, C-IDP 1108, C-IDP 1109, C-IDP 1110, C-IDP 1111, C-IDP 1112, C-IDP 1113, C-IDP 1114, C-IDP 1115, C-IDP 1116, C-IDP 1117, C-IDP 1118, C-IDP 1119, C-IDP 1120, C-IDP 1121, C-IDP 1122, C-IDP 1123, C-IDP 1124, C-IDP 1125, C-IDP 1126, C-IDP 1127, C-IDP 1128, C-IDP 1129, C-IDP 1130, C-IDP 1131, C-IDP 1132, C-IDP 1133, C-IDP 1134, C-IDP 1135, C-IDP 1136, C-IDP 1137, C-IDP 1138, C-IDP 1139, C-IDP 1140, C-IDP 1141, C-IDP 1142, C-IDP 1143, C-IDP 1144, C-IDP 1145, C-IDP 1146, C-IDP 1147, C-IDP 1148, C-IDP 1149, C-IDP 1150, C-IDP 1151, C-IDP 1152, C-IDP 1153, C-IDP 1154, C-IDP 1155, C-IDP 1156, C-IDP 1157, C-IDP 1158, C-IDP 1159, C-IDP 1160, C-IDP 1161, C-IDP 1162, C-IDP 1163, C-IDP 1164, C-IDP 1165, C-IDP 1166, C-IDP 1167, C-IDP 1168, C-IDP 1169, C-IDP 1170, C-IDP 1171, C-IDP 1172, C-IDP 1173, C-IDP 1174, C-IDP 1175, C-IDP 1176, C-IDP 1177, C-IDP 1178, C-IDP 1179, C-IDP 1180, C-IDP 1181, C-IDP 1182, C-IDP 1183, C-IDP 1184, C-IDP 1185, C-IDP 1186, C-IDP 1187, C-IDP 1188, C-IDP 1189, C-IDP 1190, C-IDP 1191, C-IDP 1192, C-IDP 1193, C-IDP 1194, C-IDP 1195, C-IDP 1196, C-IDP 1197, C-IDP 1198, C-IDP 1199, C-IDP 1200.

MA T-272	Calculus II	4 (3-2)	Fall Spring
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Prerequisites: MA T-271^S, minimum grade CL

Corequisites: None

This course is designed to develop advanced topics of differential and integral calculus. Emphasis is placed on the applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to integral-related problems with and without technology. (2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.E., A.S. and A.S. Teacher Preparation
- Mathematics Gen. Ed. course for A.A. and A.A. Teacher Preparation

MA T-273	Calculus III	4 (3-2)	Spring
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Prerequisites: MA T-272^S, minimum grade CL

Corequisites: None

This course is designed to develop the topics of multivariate calculus. Emphasis is placed on multivariate functions, partial derivatives, multiple integration, solid analytical geometry, vector valued functions, and line and surface integrals. Upon completion, students should be able to select and use appropriate models and techniques for finding the solution to multivariate-related problems with and without technology. (2014 FA) This course has been approved to satisfy the following requirement(s):

- Mathematics Gen. Ed. course for A.A., A.A. Teacher Preparation, A.E., A.S. and A.S. Teacher Preparation

MA T-285	Differential Equations	3 (2-2)	Spring
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Prerequisites: MA T-272^S, minimum grade CL

Corequisites: None

This course provides an introduction to topics involving ordinary differential equations. Emphasis is placed on the development of abstract concepts and applications for first-order and linear higher-order differential equations, systems of differential equations, numerical methods, series solutions, eigenvalues and eigenvectors, and LaPlace transforms. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to differential equations-related problems with and without technology. (2014 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Other Gen. Ed. and Premajor Elective Hour course for A.E.