



Course Syllabus Report

MA9160 Calculus 1-2 (MA9160)

MEETS GRADUATION REQUIREMENTS: Yes

NCAA APPROVED: Yes

DISTRICT APPROVED CURRICULA:

CREDITS: 0.5

STATE COURSE CODE: MAT121 (Calculus)

AVERAGE HOURS PER WEEK: 6

SIS COURSE CODE: MA9160

PREREQUISITES:

GRADE LEVELS: 9th Grade, 10th Grade, 11th Grade, 12th Grade

DEFAULT ALE CERTIFICATED TEACHER: Kim Franett Fergus

ALE COURSE GRADING SCALE:

A = 90%-100%

B = 89%-80%

C = 79%-70%

P = 60%-69%

F = 59%-0%

INSTRUCTIONAL MATERIALS NEEDED: Internet access, computer, printer, printer paper and ink, modern OS/software/web browser, headphones with microphone- if not built into the computer

DESCRIPTION Calculus is a course that combines algebra, geometry and trigonometry to study rates of change,

slopes of curves, the accumulation of the quantities and the areas under and between curves. The course focuses on

the mastery of critical skills and exposure to new skills necessary for success in subsequent math courses. The first

semester includes limits and continuity, derivatives and rates of change.

This course supports all students as they develop computational fluency, deepen conceptual understanding, and apply Common Core's eight mathematical practice skills. Students begin each lesson by discovering new concepts through guided instruction, and then confirm their understanding in an interactive, feedback-rich environment. Modeling activities equip students with tools for analyzing a variety of real-world scenarios and mathematical ideas. Journaling activities allow students to reason abstractly and quantitatively, construct arguments, critique reasoning, and communicate precisely. Performance tasks prepare students to synthesize their knowledge in novel, real-world

scenarios and require that they make sense of multifaceted problems and persevere in solving them. Throughout the

course students are evaluated through a diversity of assessments specifically designed to prepare them for the content, form, and depth of the Common Core assessments.

This course is aligned with the Common Core State Standards for Mathematics.

ESSENTIAL LEARNINGS:

Students will develop computational fluency, deepen conceptual understanding, and apply Common Core's eight mathematical practice skills.

SYLLABUS

ALE COURSE OBJECTIVES

Students will develop computational fluency, deepen conceptual understanding, and apply Common Core's eight mathematical practice skills.

ALE COURSE STANDARDS

https://www.fwps.org/cms/lib/WA01919399/Centricity/domain/796/2021_standards/ms_math/hs_math/AICE%20Calculus%201%20Priority%20Standards.pdf

FWPS PRIORITY STANDARDS CATALOG: [Standards Based Education / Priority Standards 6th -12th Grade \(fwps.org\)](#)

LEARNING REQUIREMENTS

Weekly Work Completion: Scholars will submit original work in all classes each week.

Original Work Submissions: Scholars will only submit their original work. If a scholar uses outside sources in the creation of their original work, citations must be present in the format requested by their teacher.

Weekly Communication: Scholars will communicate weekly with their teachers regarding their academic progress.

Functioning Technology/Required Materials: Scholars will always have constant and consistent access to the functioning hardware, software, technology, and required materials necessary to complete their coursework in all classes.

Academic Integrity: Academic integrity is essential to learning. scholars are expected to complete their own work. Copying, plagiarizing, cheating, or other methods of intentional deception are prohibited and could result in the scholar's removal from the class or iA entirely.

IA Policy 1st Offense: The scholar will be contacted by the teacher via phone call, the scholar will be made aware of the plagiarism and examples of how this can be avoided will be discussed. Direct instruction on plagiarism will be delivered by the teacher. iA Administration and other teachers will be made aware of the plagiarism. The work must be redone without plagiarism.

2nd Offense: The scholar and parents will be contacted by the

teacher directly and the scholar will have to complete the plagiarized assignment without plagiarism before moving on in the course. iA Administration will be made aware.

3rd Offense: The scholar will be withdrawn from the course or iA depending on the severity and/or frequency of the plagiarism.

WAC (Weekly Academic Contact): State regulations require scholars in online programs to have weekly academic contact with each teacher. This occurs by engaging with the curriculum and online instruction, submitting assignments to make progress in learning, and successfully completing courses. Scholars have multiple opportunities and methods to achieve weekly academic contact and receive teacher assistance and feedback: email, message, live online sessions, assignments, phone, and/or face-to-face meetings by appointment when applicable and in accordance with social distancing guidelines. In accordance with new state law the iA Weekly Academic Contact policies are changing. To ensure the success of all iA scholars, Weekly Academic Contact is required to remain enrolled at iA.

1st week missed WAC= Notification of missed WAC that informs scholars and parents of the consequences of additional missed WAC. (Step 1)

2nd consecutive or 3rd cumulative week of missed WAC= The scholar and parent must conference with a designee to discuss the missed contact, administer a “screener”, and develop a data-based interventions plan. (Step 2)

5th consecutive OR 6 cumulative of missed WAC= BECCA petition will be filed. (Step 3)

ACADEMIC GOALS

ALE COURSE

LEARNING ACTIVITIES

Text Books and/or Work Books., Activities.

EVALUATION

ALE Course Evaluation Methods:

Monthly Progress Review: State law also requires enrolled scholars to maintain monthly forward progress toward completing classes with success. Scholars are expected to complete one monthly module of at-standard work or have completed the teacher-prescribed plan as assigned by the certificated teacher of that course. If the assigned at-standard

work is submitted, the scholar will be considered having made Satisfactory Progress. If the assigned work is not submitted and/or is not at standard, the scholar will be considered having made Unsatisfactory Progress.

An overall Monthly Progress Review (MPR) score will be prepared in the ALE App and notification that they are ready to be viewed will be emailed to every family once a month by the Advisory/Homeroom teacher to communicate overall progress towards mastery and passing of the courses.

Scholars are either making Satisfactory Progress or Unsatisfactory Progress. If a scholar is considered having made Satisfactory progress (by the individual teachers in individual courses) in 50% or more of their courses, they will be considered having made Satisfactory progress overall. If a scholar is considered having made Unsatisfactory progress (by the individual teachers in individual courses) in more than 50% of their courses they will be considered having made Unsatisfactory Progress overall. If a scholar is determined to have made Unsatisfactory Progress for consecutive months, the Advisory/Homeroom teacher will include escalating intervention plans each month in the Monthly Progress Review. If a scholar reaches 3 months of Unsatisfactory Progress they may be withdrawn by the administration.

TIMELINES

Complete all lessons and assignments in the September module on your "modules" page in Canvas by September's monthly progress deadline.

Complete all lessons and assignments in the October module on your "modules" page in Canvas by October's monthly progress deadline.

OCTOBER Complete all lessons and assignments in the October module on your "modules" page in Canvas.

NOVEMBER Complete all lessons and assignments in the November module on your "modules" page in Canvas.

DECEMBER Complete all lessons and assignments in the December module on your "modules" page in Canvas.

JANUARY Complete all lessons and assignments in the January module on your "modules" page in Canvas.

FEBRUARY Complete all lessons and assignments in the February module on your "modules" page in Canvas.

MARCH Complete all lessons and assignments in the March module on your "modules" page in Canvas.

APRIL Complete all lessons and assignments in the April module on your "modules" page in Canvas.

MAY Complete all lessons and assignments in the May module on your "modules" page in Canvas.

JUNE Complete all lessons and assignments in the June module on your "modules" page in Canvas.