



## MAT 187 (PRECALCULUS) SYLLABUS

**Course Title and Prefix: MAT 187**

**Course Record Number: CRN 14137**

**Semester: Fall/Spring 2017-18**

**Instructor: David Andrews**

**Contact Information: [DavidAndrews@CampVerdeSchools.org](mailto:DavidAndrews@CampVerdeSchools.org) / 928-567-8012**

**Class Meeting Days/Times: M-Th 7:45-8:55am**

**Class Location: Camp Verde High School / Room 124**

### **Dual Enrollment through Yavapai College:**

This course is offered through a Dual Enrollment partnership between Camp Verde High School and Yavapai College resulting in credits that are counted towards both your high school and college education. Being enrolled in both institutions means:

- You will establish a **permanent college academic record and transcript at Yavapai College** that may be required by future colleges or universities. This permanent academic record may impact eligibility for future financial aid.
- All students are expected to be in compliance with all current published Camp Verde High School Yavapai College policies, rules, and regulations. Yavapai policies are stated in the [Student Code of Conduct](#)
- In accordance with FERPA-Family Educational Rights and Privacy Act of 1974 ([www.yc.edu/ferpa](http://www.yc.edu/ferpa)). Yavapai College records belong to the student, who can share with the parent by logging on to the website at [www.yc.edu](http://www.yc.edu).

## A. COURSE INFORMATION

### Course Description, Credits and Prerequisites

MAT187. Topics from college algebra and trigonometry essential to the study of calculus and analytic geometry. Includes linear, quadratic, polynomial, rational, exponential, circular, and trigonometric functions, trigonometry, systems of equations, and matrices. Note: Computer use and graphing calculator required (TI-83/84 recommended). Duplicate credit for MAT 152 and/or MAT 183 and MAT 187 will not be awarded. Prerequisite: MAT 122, or two years of high school algebra and one year of geometry completed within the last 4 years, or an ACT Math score of at least 22, or an SAT Math score of at least 530, or a satisfactory score on the mathematics skills assessment. Reading Proficiency. Five lecture.

### **Course Content:**

1. Functions: Definitions and Operations:  
Linear, Quadratic, Polynomial, Rational, Exponential, Logarithmic, Circular, Trigonometric
2. Trigonometry
3. Systems of equations
4. Matrices
5. Graphing calculators & computer software
6. Vectors

### **Learning Outcomes:**

1. Use definitions and operations associated with functions, including inverses, combinations, and compositions. (1,2) (QL 1)
2. Represent and interpret functions in a variety of ways; numeric, symbolic, graphic, and verbal. (1-5) (QL 3,4)
3. Solve equations and systems using a variety of techniques including algebraic and graphical. (1-5) (QL 4)
4. Graph basic functions and use translations to reflect changes made to basic functions. (1-3) (QL 1,3)
5. Apply mathematics in context and model real situations using mathematics. (1-4,6) (QLO 2)
6. Use basic trigonometric properties and identities. (1,2,4) (QL 1)
7. Communicate findings both in writing and orally using mathematical language and symbolism with supporting data and graphs. (1-5) (QL 1,3)

### **Quantitative Literacy Outcomes (General Education)**

Outcome #1: Students will be able to use appropriate mathematical language and operations.

Outcome #2: Students will be able to apply mathematical concepts to "real world" situations.

Outcome #3: Students will be able to create, analyze and interpret various representations of data (e.g., graphs, tables, charts, summary statistics, etc.)

Outcome #4: Students will be able to use a variety of problem solving strategies and evaluate their appropriateness.

### **Required Texts and Materials**

PreCalculus, Larson and Hostetler, 2004. ISBN #: 0-618-31436-9

## B. ASSESSMENT MEASURES AND GRADES:

### GRADING

- 90% - 100% Excellent work and mastery of subject
- 80% - 89% Above average work and good understanding of subject
- 70% - 79% Satisfactory work and/or understanding
- 60% - 69% Below average work and lack of understanding
- 0% - 59% Poor understanding and work

### GRADING RUBRIC

Final Exam	20%
Homework	20%
Quizzes/Participation (Daily)	10%
Tests	50%

### HOMEWORK

- Test days are the deadline for turning in homework over that chapter
- Graded on completion and showing all work
- Make sure work is NEAT and heading is visible on top-right of the page (name and lesson #)

## C. Grade Distribution & Policies:

### ATTENDANCE POLICY

- a. You have until the chapter test to turn in all assignments for the **current chapter** for full credit. Any work from that chapter turned in after the test will not be graded.
- b. If a student is absent the day before a **test** and returns the day of the test; **he/she is still expected to take the test**. Extended absences are the exception.
- c. It is your responsibility to arrange for issued notes, assignments, or other work to be done. For school-related absences, make sure you arrange with me **ahead of time** the work you will miss.  
\*\*Remember to check the assignment sheet when you are absent\*\*
- d. Per school policy, students who miss 10 unexcused days of class will have credit dropped.

### TESTING POLICY

Test retakes will only be given to a student if he or she turns in all homework from the chapter. The retake (if the score improves) will be counted as the final test score.

## D. COURSE POLICIES: STUDENT EXPECTATIONS & SUPPORT

### **Attendance Policy:**

Students are expected to attend and participate in all class meetings, labs, and field trips. A student who expects to be absent due to another school-sponsored activity or compelling personal reason must make prior arrangements with the instructor. All course work must be made up as directed by the instructor.

### **Academic Integrity & Student Conduct:**

Honesty in academic work is a central element of the learning environment. "Cheating" is the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means." It will be assumed that you will present your own work. The presentation of another individual's work as one's own or the act of seeking unfair academic advantage through cheating, plagiarism or other dishonest means are violations of the College's Student Code of Conduct.

"Plagiarism" is a form of cheating. Plagiarism is the use of distinctive ideas or works belonging to another person without providing adequate acknowledgement of that person's contribution. Violation and penalties for cheating are available in the Yavapai College Student Code of Conduct. <http://www.yc.edu/v5content/student->



[services/code-conduct.htm](#)) Violations of these rules will result in a record of the infraction being placed in your file and receiving a zero on the work in question at a MINIMUM. At the instructor's discretion, you may also receive a failing grade for the course.

### **College Learning Centers & Tutoring:**

Learning Centers are available on both the Prescott and Verde Valley Campuses. These centers provide a variety of learning support for students including tutoring, adaptive computer and learning equipment for students with disabilities, and a networked general computer lab for registered students. Please call for details: Prescott - 776-2085, or Verde Valley – 634-6562. Web link: <http://www.yc.edu/v5content/learning-center/>

### **Disability Resource Services:**

Disability Resource services provides qualified students with disabilities ranging from mobility needs, hearing or vision impairment, and learning disabilities equal access and reasonable accommodations in all Yavapai College academic programs and activities. This office supports disability and accessibility awareness and promotes a welcoming environment to all. Contact the Disabilities Resource Director for an appointment. Web Link: <http://www.yc.edu/v5content/disability-resources/>


### **Libraries:**

Library services are available online through the YC website to all students and also at the Prescott and Verde Valley Campuses. Both campuses include public computer access and are members of a countywide library network, which provides access to a wide range of information and resources at libraries throughout Yavapai County. Web Link: <http://www.yc.edu/v5content/library/>




### **Open Computer Labs:**

Most campuses have open computer lab hours for currently-enrolled students. The Prescott and Verde Campus offer Computer Commons. Please check your campus site for availability and schedules. Web Link: <http://www.yc.edu/v5content/academics/divisions/bucs/computer-commons/>

## **E. COURSE COMMUNICATION, WEBSITE AND MEDIA**

**College Website & Links:** Yavapai College uses a Central Authentication Service (CAS) to log into the college website and access information. Students log in with their YC Username & Password on the YC Homepage (<http://www.yc.edu/>). Click the  button (upper right side).

### **Available Links once you Login:**

	<b>My Email (5) ▾</b>	<b>My News (0) ▾</b>	<b>My Courses ▾</b>	<b>B</b>	 Hello, Student ▾ 
<i>YC Home</i>	<i>New E-mail</i>	<i>College Information</i>	<i>Courses in which you are enrolled</i>	<i>Blackboard Link</i>	<i>E-Mail</i>

**Student Email:** Enrolled students are required to use the YC 'Scholar' e-mail address for official College communications. To access your 'Scholar' e-mail, click the email clicking on the email icon (envelope) on the YC Homepage once you log into the college website.

For more information and e-mail assistance, download this PDF document, [Yavapai College Email](#). You may elect to forward your YC e-mail to an address different from the official Yavapai College account (see instructions on website), but assume full responsibility for reading e-mail at the forwarded location.

F. COURSE CALENDAR AND OUTCOMES ASSESSED:

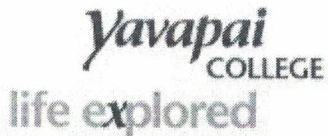
## Camp Verde High School MAT 187 Calendar

<b>Week</b>	<b>Activities/Assignments</b>	<b>Outcomes</b>
<b>Week 1-2</b> August 7-18	Chapter 1A Sections 1.1-1.4 <b>Test : Chapter 1A (1.1-1.4)</b>	1,2,4,5
<b>Week 3-4</b> August 21- 31	Chapter 1B Sections 1.5-1.9 <b>TEST: Chapter 1B (1.5-1.9)</b>	1,2,4,5
<b>Week 5-7</b> September 5-22	Chapter 2 Sections 2.1-2.7 <b>TEST: Chapter 2</b>	1,2,4,5
<b>Weeks 8-10</b> September 25-October 12	Chapter 3 Sections 3.1-3.5 <b>TEST: Chapter 3</b>	1,2,3,4,5,7
<b>Weeks 11-13</b> October 16-November 2	Chapter 4 Sections 4.1-4.8 <b>TEST: Chapter 4</b>	2,3,5,6
<b>Weeks 14-17</b> November 6-30	Chapter 5 Sections 5.1-5.5 <b>Chapter 5 Project</b>	1-6
<b>Week 19</b> December 11-14	<b>TEST: Chapter 5</b> Semester Exam Review Days	1-6
<b>Week 20</b> December 18-21	Semester Exam Review <b>Semester Exam (Ch. 1-5)</b>	1-7
<b>Week 21</b> January 8-11	Chapter 6A Sections 6.1-6.2 <b>TEST: Chapter 6A</b>	3-7
<b>Weeks 22-23</b> January 16-26	Chapter 6B Sections 6.3-6.5 <b>TEST: Chapter 6B</b>	3-7
<b>Weeks 24-26</b> January 29-February 15	Chapter 7 Sections 7.1-7.5 <b>TEST: Chapter 7</b>	3,4,5,7
<b>Weeks 27-28</b> February 19-March 1	Chapter 8 Sections 8.1-8.5 <b>TEST: Chapter 8</b>	1,3
<b>Weeks 29</b> March 5-8	Chapter 9A Sections 9.1-9.3 <b>TEST: Chapter 9A</b>	7
<b>Week 30</b> March 12-15	Spring Break	R & R
<b>Weeks 31-33</b> March 19-April 5	Chapter 9B Sections 9.4-9.7 <b>TEST: Chapter 9B</b>	7
<b>Weeks 34-35</b> April 9-19	Chapter 10A Sections 10.1-10.4 <b>TEST: Chapter 10A</b>	2-4
<b>Weeks 36-38</b> April 23-May 10	Chapter 10B Sections 10.6-10.8 <b>TEST: Chapter 10B</b>	4,6
<b>Week 39</b> May 14-17	Finish Chapter 5 Finals Review	1-7
<b>Week 40</b> May 21-24	<b>Final Exam Chapter 1-10</b>	1-7

Note: This calendar is subject to change at the discretion of the instructor and is not set in stone.







## SYLLABUS AGREEMENT

**Course Title & CRN: MAT 187 & 14137**

**Instructor Name: David Andrews**

**Semester & Course Dates: 7 August 2017 – 24 May 2018**

I have been provided with a copy of the syllabus for this course in either electronic or paper format, and I have read this syllabus and have been given a chance to ask questions about it. I understand the syllabus requirements and agree to them.

- A. This course will be recorded on my Yavapai College transcript and is part of my **permanent college academic record** that may be requested by other postsecondary academic institutions and may affect future financial aid.
- B. I understand all of the policies and procedures for this specific course and general policies for Camp Verde High School and Yavapai College.
- C. The class syllabus is subject to change and it is my responsibility to know the changes.

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Student Printed Name

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Student Signature

Date

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Parent Signature

Date

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