

# MATH 2262

## ANALYTIC GEOMETRY & CALCULUS II

### Course Syllabus Template

**Instructions:** This is a template for creating your MATH 2262 syllabus. Please fill in blanks and areas highlighted in **red** and delete any items that you do not use and add other items not mentioned here. For example, if you use MyMathLab in your course, then it should be mentioned on the syllabus. Specific style decisions (fonts, table layout, etc.) are up to the instructor.

Your course should align to the following:

#### **Standards, Goals, Objectives, or Outcomes**

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- Area A2 (*Students will demonstrate mathematical proficiency by analyzing a variety of functions and solving various equations*).
- Area D (*Students will demonstrate understanding of the physical universe and the nature of science, and they will use scientific methods and/or mathematical reasoning and concepts to solve problems*).
- Learning Goal 3, Critical Thinking (CT) (*Students will identify, evaluate, and apply appropriate models, concepts, or principles to issues, and they will produce viable solutions or make relevant inferences*).
- Specific Learning Outcomes: In this course the student will learn the methods and applications of differential calculus and the motivation for the integral calculus. Properly using the language and notation of calculus, students will analyze functions and solve applied problems. Upon completion of the course, the intent of the instructor is that the students will be able to:
  1. Determine the appropriate method and compute definite and indefinite integrals using techniques that include: by parts, partial fractions and trigonometric substitution [4].
  2. Apply integral calculus to physical problems such as area and volume [4, 5, 7].
  3. Identify whether infinite sequences and series converge or diverge [4, 5].
  4. Represent functions as power series and apply to the approximation of functions [4, 5].
  5. Calculate and apply the derivative and integral to functions represented parametrically or by polar coordinates [4, 7].

#### **Further Information for Instructors**

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- At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available through SmartEvals. Students will receive an email notification through their VSU email address when the SOI is available (generally at least one week before the end of the term). SOI responses are anonymous to instructors/administrators. Instructors will be able to view only a summary of all responses two weeks after they have submitted final grades. While instructors will not be able to view individual responses or to access any of the data until after final grade submission, they will be able to see which students have or have not completed their SOIs, and student compliance may be considered in the determination of the final course grade. These compliance and non-compliance reports will not be available once instructors are able to access the results. Complete information about the SOIs, including how to access the survey and a timetable for this term is available at <https://www.valdosta.edu/academics/academic-affairs/sois/directions-for-accessing-and-completing-sois.php>

- Undergraduate students are limited to 5 course withdrawals during their enrollment at VSU, and may withdraw “passing” before Midterm. Students must initiate the withdrawal using Banner. 6 or more withdrawals will be changed to WF – withdraw failing – and is calculated in the student’s GPA as an “F”. Students cannot withdraw after Midterm unless the student is leaving school entirely, which is referred to as a “hardship withdrawal.” The student needs to see the Dean of Students to initiate a hardship withdrawal.
- At VSU, a “drop” is part of the normal registration process. Students can register for their classes as they desire when Banner is open for registration. The last registration period for Fall and Spring generally ends on the fifth day of the semester (Friday), so students can add and drop courses up until that point with no help needed from anyone. If a student drops a course, then she/he does not have to pay fees for that course. For students who attend class beyond the first week of class, a withdraw is appropriate, not a drop. Students can use Banner to withdraw from class up until midterm without anyone’s permission. When a student withdraws, they do not get a reimbursement of fees, and the withdraw counts toward the student’s five-withdraw maximum.

Of course, that’s the ideal. Now the Registrar’s Office also has a Late Registration Add/Drop Form that it provides students to add/drop a course from their schedule after the online registration period. This seems like mixed signals, but the paper form is only supposed to be used in extenuating circumstances. If a student brings a drop/add form for you to sign as the instructor of the course being added or dropped, then please carefully read the instructions on the form. According to the drop instructions on the form, if a student has attended class “beyond the online registration period,” which ends on the fifth day of the semester (Friday), then we are not supposed to allow the student to drop at this point. Generally, if a student has an extenuating reason on the form and you wrote “N” to state that the student has not attended the class, then the department head signs the form and the form successfully makes it through the bursary and registrar’s.

For more information, see the “Drop versus Withdrawal” document on the network:  
V:\dept\MATH\Dept\_Records\Policies and Procedures\Drop vs Withdraw

- Text Summary for Thomas' Calculus: Early Transcendentals, 14ed.


- **Timeline**
- **Sample Lecture Schedule**

# MATH 2262

## ANALYTIC GEOMETRY & CALCULUS II

### Instructor Information

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- Instructor: **Name**
- Instructor contact info: **Office number, phone number, VSU email address**
- Office hours: *(follow departmental policy for the expected number of office hours per week)*

### Course Information

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- Course number: MATH 2261. Credit hours: \_\_\_\_.
- Section: \_\_\_\_ . CRN: \_\_\_\_ . Semester: \_\_\_\_ . Year: \_\_\_\_ .
- Building and Room number: \_\_\_\_ .
- Meeting days and times: \_\_\_\_ .
- Department of Mathematics, College of Science & Mathematics, Valdosta State University.

### Prerequisites and Required Materials

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- Pre-requisites: MATH 2261 with a grade of C or higher.
- Required Textbook: Thomas, Weir, and Hass. Thomas' Calculus: Early Transcendentals, Single Variable plus MyMathLab, 14ed. Addison Wesley (Pearson). ISBN-13: 9780134439419.
- **Other resources: Any other required materials or programs for your course, such as calculator, BlazeView access, MyMathLab, Mathematica, compass and straightedge, etc.**

### Course Description

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Integrals; exponential, logarithmic, and inverse functions; applications of calculus; parametric equations; polar coordinates; sequences and series.

### Student Learning Outcomes (from the Department):

In this course the student will learn the methods and applications of integral calculus and infinite series. Upon completion of the course, the intent of the instructor is that the students will be able to:

1. Determine the appropriate method and compute definite and indefinite integrals using techniques that include: by parts, partial fractions and trigonometric substitution [4].
2. Apply integral calculus to physical problems such as area and volume [4, 5, 7].
3. Identify whether infinite sequences and series converge or diverge [4, 5].
4. Represent functions as power series and apply to the approximation of functions [4, 5].
5. Calculate and apply the derivative and integral to functions represented parametrically or by polar coordinates [4, 7].

### Assignments

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- **General description of the assignments**
- **Due dates, including the official date of the final exam as indicated by the Registrar**

- Policies for missed assignments, make-up assignments, late assignments, and/or extra credit

**Recommended Syllabus Statement:**

**Make-Up Work:** Make up work or alternative assignments will be **determined by the professor and at the sole discretion of the professor. These assignments may or may not exactly duplicate the original** and will not entitle other students to the same alternatives since they may not have experienced the same situations.

(Detailed information for individual assignments may be provided separately.)

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**Assessment or Evaluation Policy**

- Explanation of how much each assignment contributes to the overall grade for the class, by providing percentages and/or point values for each type of assignment. If attendance/tardiness contribute to the course grade, please mention this here.
- List of specific Assignments: (as necessary)
- **Note: The final exam is mandatory for all students and comprehensive. The final exam comprises 20-30% of the overall course grade.**

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**Classroom Policies**

- **Attendance and tardiness:** Instructors should provide a clear policy statement of how absences and late arrivals will be considered as part of a student's class performance. Any absence policy should conform to the university policy.

University Attendance Policy from the VSU catalogue:

"The University expects that all students shall regularly attend all scheduled class meetings held for instruction or examination. . . . It is recognized that class attendance is essentially a matter between students and their instructors. Instructors must explain their absence policy in the course syllabus. All students are held responsible for knowing the specific attendance requirements as prescribed by their instructors and for the satisfactory make-up work missed by absences. When students are to be absent from class, they should immediately contact the instructor. A student who misses more than 20% of the scheduled classes of a course will be subject to receive a failing grade in the course."

- **Accommodations Statement:** Instructors should provide a statement in the syllabus on how students should proceed in order to receive classroom accommodations because of a documented disability.

(From VSU's Access Office <http://www.valdosta.edu/student/disability/faculty-and-staff-resources.php>):

Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farber Hall. The phone numbers are 229-245-2498 (V) and 229-375-5871 (Video Phone). For more information, please visit <http://www.valdosta.edu/student/disability/> or email: [access@valdosta.edu](mailto:access@valdosta.edu).

- **Academic Integrity:** Instructors should provide a brief statement explaining their expectations for academic integrity and detailing how incidents of cheating and plagiarism will be handled in the class.

(From VSU's Academic Integrity Code. The full code is available at <http://www.valdosta.edu/academics/academic-affairs/vp-office/academic-honesty-policies-and-procedures.php>) "Academic integrity is the responsibility of all VSU faculty and students. Faculty members should promote academic integrity by including clear instruction on the components of academic integrity and clearly defining the penalties for cheating and plagiarism in their course syllabi. Students are responsible for knowing and abiding by the Academic Integrity Policy as set forth in the Student Code of Conduct and the faculty members' syllabi. All students are expected to do their own work and to uphold a high standard of academic ethics."

Full information on Academic Honesty at VSU is available at

<http://www.valdosta.edu/academics/academic-affairs/vp-office/academic-honesty-at-vsuhp>

- **Classroom demeanor or conduct:** Instructors should provide their expectations of students' behavior in the classroom and/or in situations outside of class or in online environments (i.e., use of electronic devices, classroom courtesy, etc.).
- **Communication:** Instructors should specify the appropriate channels for official class communication. All VSU-related correspondence should be conducted via VSU email addresses for both student and instructor. Grades should only be discussed within a password-protected environment such as BlazeVIEW.
- **SOI Statement:** At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available through SmartEvals. Students will receive an email notification through their VSU email address when the SOI is available (generally at least one week before the end of the term). SOI responses are anonymous to instructors/administrators. Instructors will be able to view only a summary of all responses after they have submitted final grades. While instructors will not be able to view individual responses or to access any of the data until after final grade submission, they will be able to see which students have or have not completed their SOIs. These compliance and non-compliance reports will not be available once instructors are able to access the results. Complete information about the SOIs, including how to access the survey, is available on the [SOI Procedures webpage](#).
- **Title IX Statement:** Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including pregnancy status, sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, national origin, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: Maggie Viverette, Director of the Office of Social Equity, [titleix@valdosta.edu](mailto:titleix@valdosta.edu), 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.
- **The Academic Support Center:** The Academic Support Center (ASC) provides free peer tutoring in core curriculum courses, including sciences, math, writing, social sciences, humanities, and foreign languages. The ASC also provides supplemental instruction (tutor-led study group sessions) for historically difficult courses like biology, chemistry, geosciences, psychology and sociology, as well as academic success workshops. Call 229-333-7570 to make an appointment, email us at

asc@valdosta.edu, or visit our website: [www.valdosta.edu/asc](http://www.valdosta.edu/asc). Located in Odum Library, on the 2<sup>nd</sup> floor.

**Schedule of Activities and Assignments (*optional*)**

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- Include due dates for activities and assignments but also include a statement that schedule is tentative and may be subject to change.
  - Include the university-scheduled final exam time
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