Math 0194: Analytic Geometry and Calculus II


Basic Course Information

| Semester: | Fall 2022 | Instructor Name: | Caroline Bennett |
| ---: | :--- | ---: | :--- |
| Course Title \& \#: | Math 194: Analytic Geometry <br> and Calculus II | Email: | caroline.bennett@imperial.edu |
| CRN \#: | 10064 | Webpage (optional): | N/A |
| Classroom: | Building 2700, Room 2725 | Office \#: | Building 2700, Room 2765 |
| Class Dates: | 8/16/22 - 12/8/22 | Office Hours: | Mon/Wed: 4:30-6:00 (Zoom) <br> Tues/Thurs: 2:15-2:45 (on campus) |
| Class Days: | Tues / Thurs | Office Phone \#: | (760) 355 -6124 |
| Class Times: | $\mathbf{3 : 1 5 - 5 : 2 0 ~ p m ~}$ | Emergency Contact: | (760) 355-6155 |
| Units: | $\mathbf{4 . 0}$ | Class Format: | Face-to-Face (on campus) |

## Course Description

A second course in differential and integral calculus of a single variable: integration; techniques of integration; infinite sequences and series; polar and parametric equations; applications of integration. Primarily for Science, Technology, Engineering \& Math Majors. (C-ID: MATH 220) (CSU/UC)

## Course Prerequisite(s) and/or Corequisite(s)

MATH 192 with a grade of "C" or better.

## Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Demonstrate problem solving strategies by identifying an appropriate method to solve a given problem, correctly set up the problem, perform the appropriate analysis and computation, and share their interpretation of the conclusion or the outcome, using correct grammar or in an oral presentation. This outcome will be assessed through selected exercises on exams throughout the semester.

## Textbooks \& Other Resources or Links

Required: Stewart, James 2016. Calculus: Early Transcendentals $8^{\text {th }}$. Cengage Learning ISBN: 9781285741550
Recommended: A scientific calculator may be used during quizzes and exams. Graphing calculators, cell phones, and other electronic devices are NOT permitted during quizzes and exams.

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## Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Evaluate definite and indefinite integrals using a variety of integration formulas and techniques
2. Apply integration to areas and volumes, and other applications such as work or length of a curve
3. Evaluate improper integrals
4. Apply convergence tests to sequences and series
5. Represent functions as power series
6. Graph, differentiate and integrate functions in polar and parametric form

## Course Grading Based on Course Objectives

| EVALUATION: |  | GRADING SCALE |  |
| :--- | ---: | :--- | :--- |
|  |  |  |  |
| Homework/Projects | 75 | $540-600$ | A |
| Quizzes | 75 | $480-539$ | B |
| 3 exams $\times 100$ points each | 300 | $420-479$ | C |
| Final Exam (cumulative) | +150 | $360-419$ | D |
|  | 600 | Below 360 | F |

The grade that is earned, according to the point scale above, is the grade that will be received. Grades are not subjective. Grades are not negotiable. All students will be treated equally.

NOTE: The final exam in this course is cumulative and mandatory for all students.
*Professors do not GIVE grades to students. Students EARN their grades.

## Course Requirements and Instructional Methods

Homework/Projects: Recommended practice problems will be listed for each section that we cover from the Stewart text(Canvas $\rightarrow$ Pages $\rightarrow$ View All Pages). These problems are NOT collected. They are your source of practice so that you can reinforce the concepts that we cover in class and master the skills necessary for the subsequent math courses you will be taking.

The only collected homework will come in the form of Projects that will appear as typed problem sets in Canvas (Canvas $\rightarrow$ Files $\rightarrow$ Projects). A total of $2-3$ Projects will be given over the course of the semester. You may work individually or in groups of up to 4 students on Projects.

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Quizzes: Class lecture periods will include short quizzes that consist of problems taken directly from the recommended textbook practice problems. You may use your notes while working on these quizzes. Therefore, if you work through the recommended practice problems after each lecture, then you will have already completed the quiz problems in advance (possibly with different numbers, but problems will be algorithmically the same).

Exams: There will be 3 regularexams at 100 points each. Exams are closed-book and closed-note. A scientific calculator may be used during exams, but NO graphing calculators and NO cell phones or otherelectronic devices may be used.

Final Exam: The Final Exam is cumulative and mandatory for all students.
Make-Ups: Missing an exam should be a rare occurrence. However, each student has the opportunity to make up ONE missed exam in the event of a true emergency. This opportunity is the Universal Make-Up Exam, which takes place toward the end of the semester (see Course Calendar for exam dates). Any student who misses a test will take the same Universal Make-Up Exam, regardless of which exam needs replacing. This Make-Up Exam will contain material from each of Exams 1-3.

## Course Policies

## ATTENDANCE

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped. Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.


## ACADEMIC HONESTY:

Academichonesty in the advancement of knowledge requires that all students and instru ctors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.

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- Cheating is defined as fraud, deceit, or dishonesty in an academic ass ignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service.

- The consequences of academic dishonesty are severe and may include the possibility of expulsion. For further information, refer to the Standards of Student Conduct on pp. 45-46 of the 2019-2020 General Catalog.


## IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit http://www.imperial.edu/studentresources or click the heart icon in Canvas.

CANVAS LMS: Canvas is Imperial Valley College's Learning Management System. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.

IVC's services include, but are not limited to:

- Tutoring Labs
- CareerServices Center
- Child Development Center
- Student Counseling and Health Services
- Military and Veteran Success Center
- Extended Opportunity Program and Services (EOPS)
- Disabled Student Programs and Services
- Student Equity \& Achievement Program*
- Library Services and Information Literacy


## *What if I cannot afford food, books, or need otherhelp?

The Student Equity \& Achievement Program has many resources that are available to you. Please tell us what you need by submitting your request(s) here:
https://imperial.edu/students/student-equity-and-achievement/

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## Other Course Information

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. The Western Association of Schools and Colleges (WASC) has adopted a similar requirement. Since Math 194 is a 4 -unit class, during a 16 -week semester you should plan to spend a minimum of 8 hours per week working on homework, studying, receiving tutoring, etc., outside of class time, to achieve success. Keep in mind that transfer-leveISTEM courses generally require greater amounts of time commitment from students than most other courses.

## Anticipated Course Calendar

(*With the exception of the Final Exam, these dates are tentative and subject to change with advance notice !)

| Tuesday | Thursday | Weekly Goals |
| :---: | :---: | :---: |
| 8/16 First day of class | 8/18 | 6.1-6.2 |
| 8/23 | 8/25 | 6.3-6.4 |
| 8/30 | 9/1 | 7.1-7.2 |
| 9/6 | 9/8 | 7.3-7.4 |
| 9/13 | 9/15 EXAM 1 | Catch-up, review, exam |
| 9/20 | 9/22 | $7.8-8.1$; Ch. 8 applications |
| 9/27 | 9/29 | 10.1-10.2 |
| 10/4 | 10/6 | 10.3-10.4 |
| 10/11 | 10/13 | 10.5-10.6 |
| 10/18 | 10/20 EXAM 2 | Catch-up, review, exam |
| 10/25 | $10 / 27$ | 11.1-11.4 |
| 11/1 | 11/3 | 11.5-11.7 |
| 11/8 | 11/10 | 11.8-11.11 |
| 11/15 | 11/17 EXAM 3 | Catch-up, review, exam |
| 11/22 THANKSGIVING HOLIDAY | 11/24 NO CLASSES |  |
| 11/29 | 12/1 MAKE-UP EXAM | Catch-up, review, Make-Up Exam |
| 12/6 | 12/8 FINALEXAM | Review, Final Exam |

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## IMPORTANT DATES AND DEADLINES:

August 27
August 28
November 5
December 1
December 8

Last day to add class; last day to withdraw without owing fees and/or be eligible for refund Last day to withdraw without course appearing on transcripts (without receiving a "W") Last day to withdraw and receive a "W"
MakeUp Exam
Final Exam (comprehensive)

## GET TUTORING HELP WHEN YOU HAVE QUESTIONS

Our class's own embedded tutor, Soknin Whitmer, will be holding free tutoring sessions for several hours each week (solely for students in our Math 194 class).

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\text { Tuesdays and Wednesdays: } \quad \text { 1:00-2:00 pm }
$$

You may attend these sessions in person at the IVC Library (no appointments required). If you cannot attend in person, you may also use the following Zoom link:
https://www.imperial.edu/student-support/study-skills-center/
[Follow the link to the virtual front desk, then ask for Soknin Whitmer]

I will be holding office hours each week at the following days and times:

$$
\begin{array}{ll}
\text { Monday/Wednesday: } & 4: 30-6: 00 \mathrm{pm} \text { (online via Zoom) } \\
\text { Tuesday/Thursday: } & 2: 15-2: 45 \mathrm{pm} \text { (on campus) }
\end{array}
$$

Help is available, but you must take advantage of it in order to benefit. This means starting as early as possible on practice problems and homework projects, so that you will have ample time to ask questions and receive assistance.
> "Never regard your study as a duty, but as the enviable opportunity to learn to know the liberating influence of beauty in the realm of the spins for your own personal joy and to the profit of the community to which your later work belongs."
> -- Albert Einstein


