

Bismarck State College

Bismarck State College, an innovative community college, offers high quality education, workforce training, and enrichment programs reaching local and global communities.

Current Semester: *Summer 2018*

Course: Math 166 Calculus II MTWRF 10:00 – 11:20 NECE 319

Credit Hours: 4

Instructor Contact Information: Jeff Skibicki, Associate Professor of Mathematics
Office: NECE 311 B *Phone:* 224-5543
Office Hours: MTWRF 11:30 - 12:00
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Course Materials:

Textbook: Calculus:Early Transcendentals by Briggs/Cochran 2nd Edition REQUIRED

Course Description: *Prerequisites:* Math 165. Applications of the definite integral, areas, volumes of solids of revolution, surface areas, techniques of integration, improper integrals, and tests of convergence for sequences and series.

Course Outcomes:

Course Learning Outcomes (or Course Outcomes)	Program Learning Outcomes (or Program Outcomes)	Institutional Essential Learning Outcomes (IELOs)
Demonstrate an understanding of and apply the following calculus concepts: (1) areas, volumes of solids, arc length, surfaces of revolution, work (2) various integration techniques, indeterminate forms, and improper integrals (3) sequences, series, tests of convergence, Taylor polynomials, power series, and Taylor and Maclaurin series	Demonstrate competence in a variety of mathematics courses including algebra, finance, calculus, differential equations, linear algebra, and statistics by analyzing, mathematically modeling, and solving a variety of problems, then interpreting the solution utilizing reflective decision making.	Quantitative Literacy Critical Thinking Problem Solving

* The BSC Institutional Essential Learning Outcomes can be found at <https://bismarckstate.edu/uploads/0/BSCsInstitutionalEssentialLearningOutcomes.pdf>

Unit Objectives: Upon completion of the course the learner will be able to:

1. Work with techniques of integration and their applications as evidenced by classroom activities and objective tests
2. Work with polar equations and their applications as evidenced by classroom activities and objective tests
3. Work with parametric equations as evidenced by classroom activities and objective tests
4. Work with sequences and series and their applications as evidenced by classroom activities and objective tests
5. Demonstrate an understanding of how to work with power series as evidenced by classroom activities and objective tests
6. Demonstrate an understanding of how to solve real world problems using fundamental calculus concepts as evidenced by classroom activities and objective tests

Active Learning: In addition to educational strategies such as reading, listening, and reflecting, when appropriate this class makes use of learning techniques commonly known as active learning. Students should expect to participate in active learning techniques such as discussions and presentations, small group activities, writing, problem-solving, movement, case studies, role-playing, etc. These activities promote analysis, synthesis, and evaluation of class content in order to improve student learning outcomes.

Assessment Methods: 4 Exams	100 Points Each
8 Quizzes(<i>drop lowest</i>)	70 Points
Final Exam(<i>comprehensive</i>)	<u>200 Points</u>
	670 Total Points

Grading: Letter grades will be determined by dividing total points earned on exams and quizzes by 670 total possible points.

90 – 100%	A	60 – 69%	D
80 – 89%	B	0 – 59%	F
70 – 79%	C		

Attendance/Makeup: Is ***strongly recommended***. You will be responsible for ***all*** material covered during lectures and any announcements or schedule changes made in class.

Points will **not** be awarded for attendance. Your attendance is **EXPECTED**.

Makeup quizzes and makeup exams will be given for ***extenuating circumstances only***. You **must** contact me **beforehand** to make arrangements.

Policies and Procedures:

Academic Honor Code: Students at BSC are expected to be honorable in behavior and above reproach in pursuit of their academic achievements. Cheating, plagiarism, or collusion in class work, laboratory performance, shop work, or test taking is unacceptable and subject to disciplinary action. More information can be found at <https://bismarckstate.edu/uploads/resources/356/studentacademichonorcode.pdf>.

Accessibility: If you have a disability that may limit your ability to fully participate in this class, please contact the Student Accessibility Office (SAO) at 224-2575. Personnel from the SAO will work with you and your instructor to arrange for reasonable accommodations after you have completed the registration process and it has been determined that you qualify.

Email: Please note that I will only correspond with students through their **BSC email account**. Student Email Policy states: "In an effort to protect student privacy and better ensure student authenticity, official email exchanged between registered students and BSC personnel requesting a response shall require the response be exchanged from the student's official email address (i.e., NDUS ID@bismarckstate.edu). This policy is for the protection of faculty, staff, and students." More information can be found at <https://bismarckstate.edu/uploads/resources/1197/studentemailpolicy.pdf>.

Military/Veteran Statement: If you are currently or have served in the military, please contact the Veterans Services Office at 224-2575 regarding services/benefits to which you may be entitled.

Drop/Withdrawal Deadlines: Term dates can be found on Campus Connection in the class details. Drop and withdraw dates for each term can be found at <https://bismarckstate.edu/academics/records/calendarsdeadlines/>.

Student Policy Handbook: Student rights and responsibilities are documented including the student conduct policy, student academic honor code, etc. can be found at <https://bismarckstate.edu/students/resources/handbook/>.

Title IX: For more information on sexual misconduct/Title IX please go to the BSC home page (www.bismarckstate.edu), scroll to the bottom and click on Title IX.

Course Outline: Chapter 5: To review integration by substitution

Chapter 6: To utilize the definite integral to solve a wide variety of applied problems.

Chapter 7: To investigate a variety of integration techniques to expand upon the fundamentals of integration. Examine integrals with infinite limits.

Chapter 8: To understand the concept of infinite sequences and series, tests of convergence.

Chapter 9: To study power series and examine Taylor and Maclaurin series.

Chapter 10: To define parametric equations and polar coordinates, perform calculus of parametric equations, study polar graphs, and examine some applications of equations in polar coordinates.

- Additional Information:**
1. Cell phone usage and/or texting of any kind is **not** allowed in the classroom. Cell phones and other electronic devices (does not apply to calculators) must be **turned off and put away** prior to entering the classroom.
 2. Tutoring will be available at no charge to BSC students in the Sykes Student Success Center. As soon as a schedule of tutoring hours becomes available, it will be announced in class.
 3. A TI-83/84 Plus graphics calculator is **recommended** for this course. We will also make use of a computer algebra system.
 4. Final Exam Date and Time: July 27, 2018
 5. There will be no opportunity for extra credit in this class.
 6. No in class collaboration or "group work" will be allowed during quizzes, exams, or the Final Exam.

"Learning is not a spectator sport. The responsibility to learn is yours and yours alone. For learning to take place in any course, you must take an active role in the process."

***The instructor reserves the right to make changes/corrections to this syllabus for the duration of the semester.**