### **Course Syllabus**

Math – 227: Calculus II Spring 2014

**Professor:** Ian Besse **Office:** Price 208

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Lecture Location: Lecture Times:

Price Hall 203 MWF 10:30 – 11:35AM

**Textbook:** Calculus-Early **Office Hours:** 

Transcendentals, by Anton, Bivens, MWF 9:00 - 10:15, or by appointment.

and Davis, 10th ed.

#### **Course Description**

This course is an investigation of single variable integration including techniques of symbolic integration, numerical integration and error analysis, applications of integration, and improper integrals. Infinite sequences, infinite series, and Taylor series will also be discussed.

**Prerequisite**: MATH 226 with a minimum grade of C, or placement.

#### Resources

**Textbook**: Students must purchase the textbook. For convenience Sections 5.4 and 5.6 of the text are posted on Moodle. There is a 'Single Variable' edition (ISBN 978-0470647691) that will work if you are not planning on taking Math 228. If you plan to take Math 228, get the standard edition (ISBN 78-0470647684).

**Calculator**: Any graphing calculator will suffice. There are a limited number available for rent (\$20/semester). Please see the administrative assistant in Strain 102 for more information.

**Moodle**: All assignments and additional course materials can be viewed on the course Moodle site.

**Tutoring**: You may want to make use of the tutoring services offered in Scott Hall 127.

## **Course Format and Grading**

Homework (10%): Homework will be graded on completeness, performance on select problems, and presentation. Homework must be completed on 8.5" x 11" paper, stapled in the upper left corner, and have name and assignment listed on the first page. Please remove any rough edges from pages torn from spiral notebook before submitting. Homework that is difficult to read may receive a lower score. Quizzes (10%): There will be short quiz administered each week, tentatively scheduled for Weds. Maple Labs/Projects (10%): Labs will be done in the department computer lab in Price 201.

**Midterm Exams (35%):** There will be two midterm exams. The first will be held on **Wednesday, Feb. 26** and the second will be held on **Wednesday, Apr. 2**. Midterm exams will be administered during class time, may be cumulative, and may have a non-calculator portion.

**Final Exam (35%):** The final exam will be held on *Tuesday, May 13 at 8:30 AM.* You must take the final at your assigned time. Please make your travel arrangements accordingly.

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Important Dates:
Friday, Feb. 7: Last day to add/drop courses
with no record.
Mar. 22 - 30: Spring Break - No class
Friday, April 11: Last day to withdraw
Wednesday, April 23: Senior Projects Day
<b>Tues., May 13</b> : Final Exam, 8:30 – 11:00 AM

### **Expectations**

As a student enrolled in this course, you are expected to:

- Attend class, participate in class discussions, and ask questions.
- Familiarize yourself with sections of the textbook prior to their coverage in class.
- Complete all assigned work neatly, thoroughly, and on-time.
- Work enough additional problems to ensure comprehension of course material.
- Seek assistance from instructor or tutoring center when difficulties arise.

You should expect your instructor to:

- Arrive on time for lectures.
- Deliver well-prepared lectures.
- Establish clear course expectations.
- Evaluate coursework in a timely manner and provide constructive feedback.
- Be accessible and approachable outside of class.
- Promote an inclusive, supportive, and collaborative classroom environment.

## **Attendance Policy**

Attendance is expected. Students with a record of arriving late or missing class will receive a warning and an alert of academic difficulty may be filed with the Associate Dean for Student Academic Affairs. If the behavior continues, further action (from a lower final grade to dismissal from the course) may result. Absences due to official Pacific University events are excused as long as you let me know at least one week in advance, so we can work together to schedule any necessary make-up activities.

# **Late/Missed Coursework Policy**

Due dates for all coursework are firm and late work is not accepted for credit. However, I understand that occasionally circumstances outside of a student's control prevent the timely submission of work. In recognition of this, every student's lowest homework score and lowest quiz score will be dropped.

# **Academic Misconduct Policy**

Pacific University has no tolerance for academic misconduct/dishonesty. It is university policy that all acts of misconduct and dishonesty be reported to the Associate Dean for Student Academic Affairs. Additionally, grade-related sanctions for such misconduct may be imposed at the discretion of the course instructor. These sanctions can range from a reduction of grade on a single assignment to an "F" for the course. Depending upon the severity of the actions, academic misconduct may result in suspension or dismissal from the university. Forms of academic misconduct include, but are not limited to, plagiarism, fabrication, cheating, tampering with grades, forging signatures, and using electronic information resources in violation of acceptable use policies.

# **Learning Support Services for Students with Disabilities**

If you have documented challenges that will impede your learning in any way, please contact our LSS office in Scott Hall (ext.2107). The Director will meet with students, review the documentation of their disabilities, and discuss the services that Pacific offers and any appropriate ADA accommodations for specific courses.

## **Tutoring and Learning Center (TLC)**

The TLC is located in Scott Hall 127. The center focuses on delivering one-on-one and group tutoring services for math and science courses and writing skills in all subjects. Students should consult with the center's director for information on tutoring available for other subjects. Day and evening hours; walk-ins welcome.

### **Course Calendar**

Week	Monday	Wednesday	Friday
Jan. 27, 29, 31	5.4: The Definition of Area as a Limit	5.6: The Fundamental Theorem of Calculus	5.8: Average Value and Applications
Feb. 3, 5, 7	5.9: Evaluating Definite Integrals by Substitution	6.1: Area Between Curves <b>Quiz 1</b>	Snow Day
Feb. 10, 12, 14	6.2: Volume by Slicing	6.3: Volume by Cylindrical Shells Quiz 2	Computer Lab
Feb. 17, 19, 21	6.4: Length of a Plane Curve	6.6: Work Quiz 3	6.8: Fluid Pressure, Force
Feb. 24, 26, 28	7.2: Integration by Parts	Exam 1: Chapters 5, 6	7.3: Integrating Trigonometric Functions
Mar. 3, 5, 7	7.4: Trigonometric Substitutions	7.4: Continued Quiz 4	7.5: Integration by Partial Fractions
Mar. 10, 12, 14	7.7: Num. Integration; Simpson's Rule	7.8: Improper Integrals  Quiz 5	8.1: Modeling with Differential Equations
Mar. 17, 19, 21	8.2: Separation of Variables	8.3: Slope Fields; Euler's Method Quiz 6	9.1: Sequences
Mar. 24, 26, 28	Spring Break No Class	Spring Break No Class	Spring Break No Class
Mar. 31 Apr. 2, 4	Review/Catch up	Exam 2: Chapters 7, 8	9.1 Review 9.2: Monotone Sequences
Apr. 7, 9, 11	9.3: Infinite Series	9.4: Convergence Tests <b>Quiz 7</b>	9.4: Convergence Tests
Apr. 14, 16, 18	9.5: Comparison, Ratio and Root Tests	9.5: Comparison, Ratio and Root Tests <b>Quiz 8</b>	9.6: Alternating Series; Absolute and Conditional Convergence
Apr. 21, 23, 25	9.7: Maclaurin and Taylor Polynomials	Senior Projects Day No Class	9.8: Maclaurin and Taylor Series; Power Series
Apr. 28, 30 May 2	9.8: Maclaurin and Taylor Series; Power Series	9.9: Convergence of Taylor Series Quiz 9	9.10: Differentiating and Integrating Power Series
May 5	Final Review		

Final Exam: Tuesday, May 13, 8:30 - 11:00 AM

Be advised that everything listed in this syllabus is somewhat tentative and subject to minor changes as circumstances dictate. However, any changes that become necessary will be communicated as soon as possible to students during lectures, via email, and/or on Moodle.