**Syllabus of Math2255: Calculus III**

4 credit hours, Spring 2014

Instructor: Dr. Taixi Xu, Office D-122, email: [txu@spsu.edu](mailto:txu@spsu.edu)

Meetings: Section 002: 11:00 – 11:50 MTRF in D-204   
 Section 003: 1:00 – 1:50 MTRF in D-204

Office Hours: 2:00pm – 3:15pm MTRF.  
 If you would like to meet the instructor other times, make an   
 appointment by email.

Web Site: http://fac-web.spsu.edu/math/txu/math2255/

Text Book: **Stewart's Calculus**, 7th ed. by James Stewart, Brooks/Cole 2012

Chapters: 12, 13, 14, 15.

Calculator: A TI calculator is required.

Learning Upon completing this course students should be able to:  
Outcomes: 1. Define and use vector operations in two and three dimensions.  
 2. Define and use vector methods to analyze plane and space curves, and   
 curvilinear motion.  
 3. Define and use the standard techniques of multivariable calculus, both   
 differential and integral, and utilize them to solve selected applied   
 problems.

Evaluation: There will be four tests worth 100 points each, and a comprehensive final  
exam worth 150 points. Quizzes will be worth a total of 100 points. The lowest test score will be dropped. 50 points will be reserved for class participation. The grades may be curved to a normal distribution if necessary at the end of the semester.

Grading: Tests: 300 points 90% - 100% Grade A  
Quizzes: 100 points 80% - 89% Grade B  
Class Participation: 50 points 70% - 79% Grade C  
Final Exam: 150 points 60% - 99% Grade D  
Total: 600 points Below 60% Grade F

Schedule: Test 1 – Fri. Jan. 31  
Test 2 – Tue. Feb. 25  
Test 3 – Fri. Mar. 28  
Test 4 – Fri. Apr. 25  
Final Exam: TBA

Make-ups: Make-ups will only be given at the discretion of the instructor, and   
with a valid excuse (proof documents needed) for the absence. In order to request a make-up you must email the instructor prior to the exam or quiz.

Homework: Homework will be assigned regularly and should be done on time. Some of them will be discussed during the next class. Remember that you cannot learn this subject without doing the homework.

Attendance: Regular attendance is essential. You are strongly recommended to attend every class. A signup sheet will be passing around to keep track of attendance. You are responsible for knowing any material discussed and any announcements made in class, whether you are present or not.

Cell Phones: Please turn off all cell phones before class begins. Except in the case of an emergency, cell phone use, including texting, is not permitted in this class.

Honor Code: SPSU has an Honor Code and a new procedure relating to when academic misconduct is alleged. All students should be aware of them. Information about the Honor Code and the misconduct procedure may be found at <http://spsu.edu/honorcode/>

Disability Students with disabilities who believe that they may need   
Statement: accommodations in this class are encouraged to contact the counselor   
 working with disabilities at (678) 915-7226 as soon as possible to better   
 insure that such accommodations are implemented in a timely fashion.

Important Mon. Jan. 6 First Day of Class  
Dates: Thur. Jan. 9 End of Drop/Add  
 Mon. Jan. 20 Martin Luther King Jr. Holiday  
 Tue. Feb. 25 Withdrawal Day  
 Mar. 2 – Mar. 8 Spring Break  
 Mon. Apr. 28 Last Day of Class  
 Wed. Apr. 30 – Tue. May 6 Final Exams

**Calculus III:** **Homework Assignment**

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| **Section** | **Date Assigned** | **Homework Problems** |
| §12.1 |  | Pg.814: 1, 4, 7—19odd, 23, 25, 29, 33, 36, 38, 41 |
| §12.2 |  | Pg. 822: 1, 4, 5—23 odd, 24, 25, 27, 29, 31, 38, 47 |
| §12.3 |  | Pg. 830: 3—9 odd, 14, 17, 19, 21, 23, 27, 29, 31, 33, 35, 39, 41, 51, 61, 63 |
| §12.4 |  | Pg. 838: 1—19 odd, 25—39odd, 45 |
| §12.5 |  | Pg. 848: 3—11 odd, 15, 19, 21, 25—39 odd, 45, 47, 49, 51—59 odd, 61, 69, 71, 73 |
| §12.6 |  | Pg. 856: 1, 3, 5, 7, 11—19odd, 21—28, 29—35 odd, 41, 42, 45 |
| §13.1 |  | Pg. 869: 1—6, 7, 9, 11, 17, 19, 27, 40, 41, 43, 47 |
| §13.2 |  | Pg. 876: 1—13 odd, 17, 19, 21, 35—41 odd |
| §13.3 |  | Pg. 884: 1, 3, 5, 11, 13, 15, 17—27 odd, 31, 43, 47, 48, 49, 55 |
| §13.4 |  | Pg. 894: 3—15 odd, 19, 22, 23, 25, 27, 37—41 odd |
| §14.1 |  | Pg. 912: 7, 9, 11, 13—19 odd, 25, 27, 29, 31, 32, 43, 45, 53, 59—64, 65, 66 |
| §14.2 |  | Pg. 923: 1, 5—19 odd, 25, 29—41 odd |
| §14.3 |  | Pg. 935: 11, 15—39 odd, 42, 45, 47, 49, 52, 53—67 odd |
| §14.4 |  | Pg. 946: 1, 3, 5, 11, 13, 15, 17, 21, 25, 27, 29, 31, 33, 39 |
| §14.5 |  | Pg. 954: 1—13 odd, 17—35 odd, 39 |
| §14.6 |  | Pg. 967: 5—25 odd, 29, 33, 41, 43, 45 |
| §14.7 |  | Pg. 977: 1, 2, 5—15 odd, 19, 29, 31, 33, 39, 41, 43, 45, 49 |
| §14.8 |  | Pg. 987: 1—19 odd, 27, 29-35 odd |
| §15.1 |  | Pg. 1005: 1, 3, 11, 12, 13 |
| §15.2 |  | Pg. 1011: 1, 3—21 odd, 25, 27, 29, 35 |
| §15.3 |  | Pg. 1019: 1—9 odd, 11, 12, 13, 15, 17, 19, 21, 23, 25, 27, 31, 35, 37, 43—53 odd, 55, 57, 59 |
| §15.4 |  | Pg. 1026: 1—4, 5, 7, 9, 11, 15—25 odd, 29, 31, 37 |
| §15.5 |  | Pg. 1036: 1—13 odd, 17-23 odd |
| §15.6 |  | Pg. 1040: 1-19 odd (**optional**) |
| §15.7 |  | Pg. 1049: 1—15 odd, 19, 21, 27, 29, 31, 33, 35, 39, 41, 47 |
| §15.8 |  | Pg. 1055: 1—25 odd, 28, 29, 30 |
| §15.9 |  | Pg. 1061: 1—15 odd, 17, 21, 23, 25, 27, 29, 35, 39, 40 |