

## SYLLABUS FOR MATH 141

**Text:** *Calculus - Concepts and Contexts*, by James Stewart, Brooks/Cole Publishing Company, Third Edition.

**Calculators:** A graphing calculator is required for this course. The Mathematics Department highly recommends and provides support for the TI-83+ and TI-84+ models.

### Remarks for instructors:

1. University regulations require that no in-class written quizzes or tests counting more than 10% of the course grade may be given during the last five calendar days prior to the study period (except for courses which are specifically exempt from this policy). For Spring 2006, this implies that no such quiz or test should be given between April 26 and April 30. The deadlines for undergraduate students to drop without a W, with a W or with a WP/WF grade are January 20, February 21 and April 4, respectively. Students receiving financial aid may need to receive approval from the Office of Financial Aid and Scholarships before withdrawing from the course.
2. In Spring 2006, there are 57 meetings of the MWRF sections and 56 meetings of the MTWF sections.
3. Sections 1.1-1.6 (the prerequisite material) and 4.7 are not part of the syllabus. Section 4.9 is covered in Math 142.
4. Math 141 students may also register for Math 109 (Algebra Workshop), a lab-based guided tutorial for students who need additional help (as determined by placement exams or classroom performance). Students practice algebraic and trigonometric skills needed (but not necessarily taught) to master the material covered in Math 141. This one-credit course meets at a time selected by the student and compatible with his/her schedule. Interested students should register for an appropriate section of Math 109. Once registered, they can check the announcements at [online.utk.edu](http://online.utk.edu) under Algebra Workshop for more information.
5. This syllabus is based on 56 meetings including 3 midterm exams. If one prefers to have 4 midterm exams, a possible grouping of the material is as follows:
  - Sections 1.7 - 2.5
  - Sections 2.6 - 3.4
  - Sections 3.5 - 4.2
  - Sections 4.3 - 4.8.
6. One may choose to postpone covering Section 1.7 until one gets to Section 3.5 where tangents to parametric curves are discussed.
7. One may choose to combine Sections 2.1 and 2.6.

Lecture	Section	Suggested Homework Problems
1	1.7	pp. 79-82: 3, 4, 5, 10, 11, 20, 25, 27, 33, 37, 40
2	2.1	pp. 97-98: 1, 3, 5
3-4	2.2	pp. 106-107: 5, 6, 7, 8, 11, 13, 23, 25
5	Appendix D	pp. A38-A39: 1, 2, 3, 5, 7, 11, 15
6-7	2.3	pp. 115-116: 1, 2, 7, 9, 12, 17, 19, 21, 23, 25, 26, 29, 31, 37, 40, 41, 42, 43
8-9	2.4	pp. 126-127: 3, 7, 11, 14, 15, 16, 21, 25, 29, 31, 32, 33, 35, 37, 39, 41, 49
10-11	2.5	pp. 137-139: 3, 9, 14, 15, 18, 21, 25, 31, 33, 37, 39, 43, 44, 47, 49
12-13	2.6	pp. 145-147: 5, 8, 11, 13, 14, 15, 17, 18, 21, 22
14	2.7	pp. 153-154: 3, 7, 9, 11, 15, 17, 25, 29, 32, 33, 35, 36
15-16	2.8	pp. 165-168: 3, 5, 6, 7, 8, 9, 10, 20, 21, 23, 25, 31, 35, 37, 39, 45, 47
17	2.9	pp. 172-174: 3, 6, 10, 11, 15, 21, 27
18-19	Review	pp. 176-178: 1, 5, 9, 10, 13, 19, 21, 22, 26, 27, 28, 35, 38, 41
20	First Exam	
21-22	3.1	pp. 190-192: 5, 7, 9, 19, 21, 31, 33, 38, 41, 43, 44, 47, 55, 56, 65
23	3.2	pp. 198-200: 5, 11, 13, 19, 27, 31, 35, 39, 44, 45, 48
24-25	3.3	pp. 210-213: 1, 5, 7, 9, 16, 18, 31
26	3.4	pp. 218-220: 3, 5, 9, 17, 21, 27, 29, 31, 33, 39, 43
27-28	3.5	pp. 228-231: 3, 5, 7, 9, 15, 18, 23, 45, 49, 57, 63, 73, 74
29-30	Appendix H.1	pp. A66-A68: 47, 49, 51, 53, 62
31-32	3.6	pp. 238-240: 3, 7, 11, 13, 15, 27, 29, 31, 51, 53
33	3.7	pp. 245-246: 3, 7, 9, 11, 19, 25, 27, 33
34	3.8	pp. 252-253: 1, 3, 5, 7, 9, 15, 19, 21, 23, 27, 31, 33
35-36	Review	pp. 255-257: 1, 5, 9, 13, 23, 25, 27, 33, 35, 38, 39, 49, 57, 59, 61, 64, 68
37	Second Exam	
38-39	4.1	pp. 267-269: 1, 3, 5, 7, 9, 11, 13, 15, 18, 21, 22, 25, 29, 31, 33
40-41	4.2	pp. 274-277: 17, 19, 23, 37, 39, 41, 56, 57
42-43	4.3	pp. 286-289: 1, 5, 6, 7, 9, 15, 17, 19, 21, 25, 27, 29, 33, 46, 49, 53, 54
44	4.4	pp. 295-296: 9, 11, 15, 21, 23
45-46	4.5	pp. 303-305: 5, 7, 9, 15, 23, 25, 33, 41, 45, 55, 57
47-49	4.6	pp. 311-315: 3, 7, 9, 11, 14, 15, 17, 19, 22, 25, 26, 31, 37, 38, 40, 43
50	4.8	pp. 325-327: 4, 5, 6, 7, 9, 11, 15, 21, 23, 25, 31
51-52	Review	pp. 336-338: 1, 8, 11, 14, 15, 25, 26, 29, 32, 35, 36, 38, 41, 43, 45, 48, 57
53	Third Exam	
54-56	Review	