MTH 1280 (4 semester hours) DEPARTMENTAL SYLLABUS

COORDINATOR: Karen Brackenridge (karen.brackenridge@wright.edu)

PREREQUISITES: Placement test on ALEKS of 46 or better, ACT of 22 or better, SAT of 520 or better, OR finishing first 4 modules of DEV 0970

TEXT (bound or e-book): <u>Algebra and Trigonometry, Fourth Edition</u> by Stewart, Redlin, & Watson ONLINE HOMEWORK REQUIRED: WebAssign (code comes with paperback bound book or can be purchased separately which gives access to e-book, previously purchased codes for other courses will not work) CALCULATOR: TI 81-86 or equivalent calculator required, calculators with symbolic manipulation like TI 89 not permitted, rentals available with refundable deposit through Math Learning Center, 31 Library

| | | (Instructor may add or delete) | | Allotted # 55 min. |
|-------------------|---------------|--|-----------------------|--------------------|
| Chapters/Sections | | Problem List $\div 3^*$ means every 3^{rd} prob. | Comments | class meetings |
| P/1-8 | P1-P2-intro | No assigned problems | Mention use of a | 1 each section |
| Prerequisites | P3-int. exp. | 12-33 ÷3* (so 12,15,18,etc.) | model in P1 and | except 2 days |
| | P4-rat. exp. | 59-85 odd,94 | set notation & | for P7 |
| | P5-alg. exp. | 15-75 every 6 th (so 15,21,etc.), | scientific notation | |
| | | 78,90 | on calculator (use | |
| | P6-factoring | 12-54 ÷3*,63-99 ÷3*,117 | of E) in P2, focus | |
| | P7-rational | 15,19,27,33,39,43,55,59,65,98 | on special | |
| | P8-eq. | 12-63 ÷3*,93,96,102,106 | formulas in P5 | 8 days total |
| 1/1-4,6-8 | 1.1-plane | 21-31odd,35,37,41 | Do geometry appl. | 1 each except |
| Equations and | 1.2-circle | 10,27,48,59,67-85odd | & work but no drt | 2 days ea. for |
| Graphs | | 12-33 ÷3*,39,42,55-57,62-63 | in 1.4, also discuss | 1.2 & 1.7 and 3 |
| | 1.3-lines | $9-51 \div 3^{*}, 87, 90$, systems handout | <i>i</i> for negative | days for 1.4 |
| | 1.4-quad. | 6-60 ÷3*,67,70,74,85,91 | discriminant | |
| | 1.6-other eq. | 6-57 ÷3*,80 | & definition, do | |
| | 1.8-abs. val. | 10,12,27-37odd,57 | 1.8 before 1.7 & | |
| | 1.7-ineq. | 15-63 every 6 th ,79,82 | review set notation | 11 days total |
| 2/1-8 | 2.1-func. | 17-25odd,31-43odd,44,51-65odd, | Discuss 4 ways | 1 each except |
| Functions | | 83,86 | p.190, focus on | 2 days for 2.1 |
| | 2.2-graphs | 4,6-24 ÷3*,33-41odd,51-59odd,81 | slope as rate of | |
| | 2.3-info | 7,9,11,15,31,43,45,55,59 | change in 2.4-2.5 | |
| | 2.4-ave. rate | 7-25odd,30,37-38 | | |
| | 2.5-linear | 9-33 ÷3*,43,47,50 | | |
| | 2.6-trans. | 9-69 ÷3* | | |
| | 2.7-comb. | 9-57 ÷3*,63-64,76,80 | | |
| | 2.8-1 to 1 | 7-17,25-26,29,37,39,49,51,71,97 | | 9 days total |
| 3/1-3,5-6 | 3.1-quad. | 6-54 ÷3* | Skip drt on p.273, | 2 each except |
| Polynomial and | p.273-model | 1-11odd,19,21,23,24,26,29 | no book hmwk. | 3 days for p.273 |
| Rational | 3.2-poly. | 9-42 ÷3*,45,51-54 | from 3.3 & 3.5, | |
| Functions & | 3.3,3.5 | Handout Div. Poly. & Fund. Thm. | skip slant in 3.6 | |
| Modeling | 3.6-rat. | 15-42 ÷3*,43,45,49,51,57,89 | | 11 days total |
| 4/1-5 | 4.1-exp. | 9-39 ÷3*,53,57,59,61-62 | | 1 each except |
| Exponential and | 4.2-е | 7-15odd,23,27,33,36-37 | | 2 days ea. for |
| Log Functions | 4.3-logs | 9-66 ÷3*,96-97,99 | | 4.3, 4.4, & 4.5 |
| | 4.4-laws | 9-45 ÷3*,49-55odd,59-60,73 | | |
| | 4.5-eq. | $12-36 \div 3^{*}, 51-66 \div 3^{*}, 89, 91, 95, 99$ | | 8 days total |

47 days total, leeway is 7-8 days for tests, review, more time on individual sections, etc.

COMPONENTS FOR GRADE (uniform for all sections)

| Test #1 | 13% | Recommended covering P3-1.6 | (11 sections) |
|---------|-----|--------------------------------|--------------------------------------|
| Test #2 | 13% | Recommended covering 1.7-2.8 | (10 sections) |
| Test #3 | 13% | Recommended covering 3.1-4.5 | (11 sections, minimal from 3.3,3.5)) |
| | | (all tests made by instructor) | |

Note: At his/her discretion, the instructor may choose to give four tests instead of three, but they must all be equal in weight and collectively add to 39% of the course grade (i.e. each one would be worth 9.75%).

| Common final | 25% | Made and graded by all instructors of MTH 1280 |
|---------------------------------------|-----|--|
| WebAssign | 21% | Online homework set up by course coordinator |
| Instructor quizzes, assignments, etc. | 15% | Made by instructor |

WEBASSIGN INFORMATION (ONLINE HOMEWORK COMPONENT)

Students are required to obtain a WebAssign code and add themselves to the instructor's course (webassign.com). The code (i) is either bundled with each new copy of the paperback version of the textbook OR (ii) can be purchased separately, automatically providing access to the e-book version of the text. NOTE: THE WEBASSIGN CODE IS GOOD FOR THE LIFETIME OF USE OF THE MOST CURRENT EDITION (now the 4th edition) of the textbook. This same textbook is being used for MTH 1350 (Analytic Geometry and Trigonometry), so the book and code will be valid for that course as well at no additional cost. If students purchase a used bound copy or other version of the textbook, the WebAssign code will probably not be valid (since the previous owner would have used it), so access to WebAssign will still need to be purchased.

Instructors will be given WebAssign profiles, and they will need to add the Stewart book to their profiles. The course coordinator will provide pre-made WebAssign assignments for use throughout the course. The instructors need to set their own due dates for these assignments, and they have the option to delete or add problems to the assignments. Individual instructors may also add additional assignments as needed.