

**MATH-41-11** Monday through Friday: 12:30pm-1:20pm in E36

**INSTRUCTOR:** Dr. Iaroslav Kryliouk      **OFFICE:** S76C

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**OFFICE HOURS:** Daily, 9:45am-10:15am in S76C; daily, 1:25pm-1:45pm, except Friday, in S76C.

**Tutorial Center:** S43

**Course Description:** This course in combination with MATH42 Trigonometry and MATH43 will prepare students to take the calculus sequence. The course includes an in-depth study of polynomial, rational, exponential and logarithmic functions, graphs, solving equations.

**Text:** *Precalculus with Limits*, by Ron Larson, 3rd edition, 2011, Brooks/Cole, Cengage Learning

More than ever in your past mathematics experience, *reading* your textbook will be essential. The exercise sets are written with the intent of forcing the student to approach problems graphically and numerically, as well as the traditional symbolic (algebraic) approach. There is such variety in the exercise sets, that a few lecture examples often can't illustrate every type of question in the homework. This make the reading a crucial part of the students day-to-day work. The De Anza College catalog advises students to do at least 2 hours of work outside the classroom for each hour spent in class.

**Technology:** Students must have a graphing calculator. The instructor will use a Texas Instruments TI-84 plus in lectures. Consequently, the TI-84 plus (or TI-84, TI-83+, TI-83) is recommended for the students, but any graphing calculator that has a "table" feature is acceptable. (The old TI-81 and TI-85 models do *not* have a table feature!). *Any calculators that can do symbolic mathematics such as TI-89 or HP-49 are not allowed on exams and quizzes.*

**Pre-requisite:** Mathematics 114 or equivalent (with a grade C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year.

**Quizzes:** There will be 4 quizzes 20 points each.

**Tests:** There will be four (4) tests worth 100 points each. Unless otherwise indicated, the graphics calculator will be required for tests. Material from any lecture, homework assignment, or quiz is fair game on test day. Be advised that all in-class assesments are closed book and closed notes ones.

The tentative schedule (subject to revision) of tests and the material covered is the following:

**Test 1:** Jan 24 (A2, A5, A6, Sec 1.1, Sec 1.2, Sec 1.3)

**Test 2:** Feb 9 (Sec. 1.4-Sec 1.10 (all))

**Test 3:** Mar 5 (Sec. 2.1-Sec. 2.7 (all))

**Test 4:** Mar 16 (Sec. 3.1-3.5 (all))

**Makeup Tests:** There are no make –up tests, *under any circumstances*. If a test is missed, the percentage on the final exam will replace the score of the missing exam. If a second exam is missed, the grade will be a zero.

The lowest score of 4 regular tests will be replaced by a percentage on the final exam, provided the latter is higher.

**Final Exam:** There will be a mandatory comprehensive two-hour final exam worth 200 points, and this exam *must* be taken during the scheduled exam time on Wednesday, March 28, 11:30am-1:30pm in E36.

**Homework:** WEBASSIGN: <http://www.webassign.net>

- **Online homework system: REQUIRED** in this class
- You are required to do homework and turn in it by the weekly due dates using Webassign. Homework will be graded in Webassign.

**Mini-projects:** From time to time you may have mini-projects. Points earned for mini-projects will apply to your total grade. These are bonus points!

**Attendance:** Attendance will be taken at each session. **You are expected to attend all classes on time.** If you miss 3 class meetings, you may be dropped from the class. However this is your responsibility to drop the course officially if you decide not to attend any longer. The students are responsible for any material covered and any announcements made in their absence.

**Final Grade:** Your final grade will be determined based on the following:

**Grading Scale:**

Quizzes, HW

|            |         |                         |                         |
|------------|---------|-------------------------|-------------------------|
| (80+70)    | 150 pts | X $\geq$ 723 (96.5%)=A+ | X $\geq$ 566 (75.5%)=C+ |
| Test 1     | 100 pts | X $\geq$ 697 (93%)=A    | X $\geq$ 525 (70%)=C    |
| Test 2     | 100 pts | X $\geq$ 671 (89.5%)=A- | X $\geq$ 450 (60%)=D    |
| Test 3     | 100 pts | X $\geq$ 645 (86%)=B+   | X $\leq$ 450 (60%)=F    |
| Test 4     | 100 pts | X $\geq$ 618 (82.5%)=B  |                         |
| Final Exam | 200 pts | X $\geq$ 592 (79.0%)=B- |                         |

Total Points X=750 pts

Missing one of the major tests is made up through added weight on the comprehensive final exam. Missing additional tests results in a score of zero.

**\*\*\* NO OTHER MAKE-UPS WILL BE GIVEN\*\*\***

A grade of “I” (incomplete) will be given at the instructor’s discretion, if:

- i) A student has successfully completed at least 75% of the course work, and
- ii) has shown acceptable evidence which justifies his/her incomplete work.

**Important Dates:**

Monday, Jan 5- Winter quarter classes begin

Saturday, Jan 20-Last day to add quarter-length class

Sunday, Jan 21-Last day to drop for with no record of grade

**Wednesday, Jan 24-Test 1 (A2, A5, A6, Sec 1.1, Sec 1.2, Sec 1.3)**

**Monday, Jan 15**-Observance of Martin Luther King's Birthday

Friday, Feb 2 -Last day to request P/NP grade

**Monday, Feb 12 -Test 2 (Sec 1.4-1.10 (all))**

**Feb 16-19—Holiday: Presidents' Day Weekend**

**Friday, Mar 2**-Last day to drop with a "W" (withdraw date is enforced)

**Monday, Mar 5-Test 3 (Sec 2.1-2.7 (all))**

Friday, March 23-Last day of classes

**Wednesday, Mar 16-Test 4 (Sec 3.1-3.5 (all))**

**Wednesday, March 28-Final exam 11:30am-1:30pm, in E-36**

\*\*\* (N.B.: It is the student's responsibility to complete the withdrawal process. Student who stop attending class are NOT automatically dropped. A student who stops attending class and does not complete the withdrawal process receives the grade of "F")

**Academic Misconduct:** Academic dishonesty will not be tolerated. If a student is found cheating on an exam, plagiarizing on writing assignments, or violating other codes of academic integrity, he or she will receive a failing grade for the course and may be reported to the college for an appropriate action. See section on Academic integrity in your current schedule of classes catalog.

**If you are student with a disability:** For information or questions about eligibility, support services or accommodations to disability (physical or learning disability) see contacts below:

Disability Support Service (DSS): Student Services Building (408) 864-8753; TTY 408) 864-8753

Educational Diagnostic Center (EDC): Learning Center West 110; (408) 864-8839

Special Education Division: 864-8407; [www.deanza.edu/specialed](http://www.deanza.edu/specialed)

## TENTATIVE CALENDAR

|                 | MONDAY  | TUESDAY                                   | WEDNESDAY  | THURSDAY                                  | FRIDAY   |
|-----------------|---|---|--|---|--|
| JAN             | <b>8</b><br>classes start<br>Syllabus                                       | <b>9</b><br>A2                            | <b>10</b><br>A5  | <b>11</b><br>A6                           | <b>12</b><br>A6  |
| JAN             | <b>15</b><br><b>Observance<br/>of Martin<br/>Luther King's<br/>Birthday</b> | <b>16</b><br><i>Quiz 1</i>                | <b>17</b><br>Sec. 1.1                                    | <b>18</b><br>Sec. 1.2                     | <b>19</b> Sec. 1.3<br><b>Sat, Jan 20: Last day to add</b><br><b>Sun, Jan 21: Last day to drop</b><br><b>with no record</b> |
| JAN             | <b>22</b><br>Sec. 1.3   | <b>23</b><br><b>Review<br/>for Test 1</b> | <b>24</b><br><b>Test 1<br/>(A2,5,6, 1.1<br/>1.2,1.3)</b> | <b>25</b><br>Sec. 1.4                     | <b>26</b><br>Sec. 1.4  |
| JAN<br>/<br>FEB | <b>29</b><br>Sec. 1.5   | <b>30</b><br>Sec. 1.6                     | <b>31</b><br><i>Quiz 2</i>                               | <b>1</b><br>Sec. 1.7                      | <b>2</b><br>Last day to request Pass/No Pass<br>Sec. 1.8   |
| FEB             | <b>5</b><br>Sec. 1.8  | <b>6</b><br>Sec. 1.9                      | <b>7</b><br>Sec. 1.9                                     | <b>8</b><br>Sec. 1.10                     | <b>9</b><br><b>Review for Test 2</b>   |
| FEB             | <b>12</b><br><b>Test 2<br/>(1.4-1.10)</b>                                   | <b>13</b><br>Sec. 2.1                     | <b>14</b><br>Sec. 2.2                                    | <b>15</b><br>Sec. 2.3                     | <b>16 Feb 16-19</b><br><b>Holiday: Presidents' Day Weekend</b>   |
| FEB             | <b>19 Feb 16-19</b><br><b>Holiday:<br/>Presidents'<br/>Day Weekend</b>      | <b>20</b><br>Sec. 2.4                     | <b>21</b><br><i>Quiz 3</i>                               | <b>22</b><br>Sec. 2.5                     | <b>23</b><br>Sec. 2.5  |
| FEB<br>/<br>MAR | <b>26</b><br>Sec. 2.6   | <b>27</b><br>Sec. 2.6                     | <b>28</b><br>Sec. 2.7                                    | <b>1</b><br>Sec. 2.7                      | <b>2</b><br>Last day to withdraw with "W"<br><b>Review for Test 3</b>  |
| MAR             | <b>5</b><br><b>Test 3(2.1-2.7)</b>  | <b>6</b><br>Sec. 3.1                      | <b>7</b><br>Sec. 3.1                                     | <b>8</b><br>Sec. 3.2                      | <b>9</b><br>Sec. 3.3   |
| MAR             | <b>12</b><br><i>Quiz 4</i>  | <b>13</b><br>Sec. 3.4                     | <b>14</b><br>Sec. 3.5                                    | <b>15</b><br><b>Review for<br/>Test 4</b> | <b>16</b><br><b>Test 4 (3.1-3.5)</b>   |
| MAR             | <b>19</b><br>Sec. 10.2  | <b>20</b><br>Sec. 10.3                    | <b>21</b><br>Sec. 10.4                                   | <b>22</b><br><i>Quiz 5</i>                | <b>23</b><br><b>Review<br/>for FE</b>  |
| MAR             | <b>26</b>   | <b>27</b>                                 | <b>28</b><br><b>Final Exam<br/>11:30-1:30</b>            | <b>29</b>                                 | <b>30</b>  |

**Student Learning Outcome(s):**

\*Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic, and tabular representations.

\*Synthesize, model, and communicate real-life applications and phenomena using algebraic and transcendental functions.