**Instructor Information**

**Instructor:** Dr. Lamies Nazzal  
**Office:** JB-528  
**Office Hours:** WF: 1:15 – 3:30 p.m; or by appointment  
**Phone Number:** (909) 537-7613  
**E-Mail:** lnazzal@csusb.edu

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**Course Description**

- Preparation for calculus focusing on quantitative reasoning and functions. This course focuses on developing skills to understand and describe the behavior of linear, exponential, logarithmic, polynomial, rational, and trigonometric functions.
- Math 120 satisfies the General Education Quantitative Reasoning requirement. It also prepares you for Math 211 (Calculus I) and some other courses.
- Prerequisites for this course are Math 110 or satisfactory score on the ELM exam.

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**Course Goals**

- To understand the central ideas of the course and prepare students for success in calculus.
- To support students in improving their problem solving abilities.
- To learn how to make logical and verbal arguments.
- To increase algebraic and procedural fluency.

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**Time and Place**

MWF 12:00 – 1:10 p.m. in JB-262

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**Workbook/Online Text**

A workbook with an associated online text is required for this course. The workbook is: *Pathways to Calculus, by Carlson, Oehrtman, and Moore, 6th edition.* You will need a paper copy of the workbook with access code. The workbook includes investigations. The online text includes embedded videos and interactive applets to help further your understanding of the concepts covered. When you purchase your workbook (at the Bookstore or online at [http://www.rationalreasoning.net](http://www.rationalreasoning.net)) on the inside cover there will be an access code to the online website.
**Essential Websites**

- **BLACKBOARD**: This is the home base for the course including assignments, announcements, grades, etc.

- **RATIONAL REASONING**: Buying the workbook gives you access to the online text at [http://www.rationalreasoning.net](http://www.rationalreasoning.net). The text includes embedded videos that greatly enhance your learning.

- **WeBWorK**: Online homework will be completed at [webwork.csusb.edu](http://webwork.csusb.edu). Log in with your MyCoyote credentials. You should already be in the system.

- **"Clicker" Program**: Program for attendance and checking for understanding: [http://socrative.com](http://socrative.com). Log in when requested during class. Use your real name (Last, First).

- **Graphing Utility**: a device that will graph equations and plot points.
  - **Recommended online graphing calculator**: [http://desmos.com](http://desmos.com) on any internet device, or download the free Desmos app for phones or tablets.
  - **Another free math program**: Geogebra [http://geogebra.org](http://geogebra.org). A little harder to use than Desmos, but more powerful. Especially good for calculus, if you're going there. You can also download it for free.

**Your Responsibility**

1. Attend class and contribute to the class discussions.
2. Bring to class every day:
   - Your *Pathways to Calculus* workbook
   - Notebook with paper, graph paper, pencils, erasers, etc.
   - A graphing utility: Desmos or GeoGebra (see above).
3. Try the homework as soon as it is assigned. Ask questions during the next class so that you can finish your homework on time.
4. Check out class materials on BlackBoard regularly.
5. Come to an office hour or arrange to see me if you need additional support.

**Class Protocol**

- Please plan to be on time for class and to stay for the entire class period. It can be disruptive to the class when students frequently arrive tardy and/or leave early.
- There may be instances where computers, smartphones or tablets will be needed to complete course-related exercises. Unless instructed to use such devices, please otherwise refrain from using wireless communication devices during class.
- In the event that class is unexpectedly canceled (e.g., fire, winds), you are still responsible for the day’s work. It is your responsibility to check your email and Blackboard for notifications concerning the material, reading, and homework for that day. If you must be tardy (leave early) for an unavoidable reason, that’s OK. However, it is your responsibility to let me know.
- Please turn off the ringer on your cell phone during class time – this includes “vibrate”. (This is especially imperative during tests and quizzes since the vibration may interfere with another student’s concentration.)

**Extra Help**
It is imperative that each student seeks any help that would ensure his or her success in this course. It is your responsibility to arrange for extra help if you need it. I am more than happy to help you improve your understanding and I want you to be successful, but it is up to you to make the effort to seek that help! Here are some suggestions for obtaining help:

- You are encouraged to visit me during office hours or make an appointment.
- Join/form a study group.
- Get help from the Math Peer Tutoring center in JB 391.
- Go to the Learning Center (UH-351). You can call them at 909-537-3038. (For hours and tutoring schedule go to https://www.csusb.edu/tutoring)

**Evaluation**

Each student will be evaluated in the following areas.

1. **Attendance & Participation:** It is critical that you attend every class session. Your success in this class is dependent on your participating in lecture and small group work. You should bring your workbook to class and record your thinking and solutions to problems assigned and worked during class. Since homework will be similar to problems worked in-class it will be helpful to review your workbook solutions before beginning your homework. Reviewing your solutions to workbook questions is also the best way to study for an exam. You receive participation points during each class session for completing the workbook investigations and participating in class discussions. If missing a class is unavoidable, it is your responsibility to find out what you missed and arrange to do the work on your own before you come back to the next class period. **More than two absences will result in an overall grade reduction of 2 percentage points per class missed. Persistent tardiness and early departures will count as absences as well.**

2. **Homework:** Online homework will be assigned for each section ("Investigation") covered in class. There might be a short review assignment each weekend. Homework will be assigned on WebWork. You can access WebWork by selecting our class/section and signing in at webwork.csusb.edu. The homework assignments will be available Monday and will be due Sunday at 11:59pm. **Homework will NOT be accepted late.** However, your lowest score will be dropped at the end of the quarter.

Make sure you understand the homework you complete—you might be given an in-class quiz periodically to assess your comprehension of the ideas introduced in class and practiced in homework, prior to each class session.

3. **Quizzes:** Throughout the quarter there will be in-class quizzes that assess your mastery of the homework and class discussions. There will be no make-up quizzes. These quizzes will typically not be announced in advance. The best way to prepare
for quizzes is to complete your homework (with understanding) and pay attention during lecture.

4. **Midterm:** There will be a midterm exam tentatively scheduled for Wednesday, Feb 14th. If you miss the midterm, you will receive a 0 for that test. There are **NO** make-up tests (unless if you have a written verifiable excuse). The best possible preparation for the exam is regular attendance and participation in class, and completion of assigned homework.

5. **Final:** The final exam will be a 2-hours cumulative exam. It will be held Friday, Mar. 23rd from 12:00 to 1:50 p.m.

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**Course Goals/Student Learning Outcomes**

Students completing this class will:

1. Develop quantitative reasoning skills.
   - Student learning outcomes are:
     a. Students will gain mastery of computational skills in algebra, trigonometry, or calculus
     b. Students will represent mathematical information symbolically, verbally, numerically, analytically, visually, and graphically
     c. Students will interpret mathematical models such as formulas, graphs, and tables.

2. Develop problem solving abilities and critical thinking skills.
   - Student learning outcomes are:
     a. Students will interpret mathematical problems in a variety of situations
     b. Students will identify appropriate problem solving strategies for various problems
     c. Students will apply mathematical models to, or derive mathematical models from, real-life contexts
     d. Students will logically analyze and evaluate a proposed solution to a mathematical problem.

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**Grading Policy**

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<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Attendance &amp; Participation</td>
<td>5%</td>
</tr>
<tr>
<td>Homework/Quizzes</td>
<td>30%</td>
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<tr>
<td>Midterm</td>
<td>30%</td>
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<tr>
<td>Final</td>
<td>35%</td>
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**Grading Scale**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>92 – 100 %</td>
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<tr>
<td>A-</td>
<td>89 – 91 %</td>
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<tr>
<td>B+</td>
<td>87 – 88 %</td>
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<tr>
<td>B</td>
<td>82 – 86 %</td>
</tr>
<tr>
<td>B-</td>
<td>79 – 81 %</td>
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<tr>
<td>C+</td>
<td>77 – 78 %</td>
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<tr>
<td>C</td>
<td>70 – 76 %</td>
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<tr>
<td>NC</td>
<td>Below 70 %</td>
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Important Dates

- Last day to add classes via MyCoyote Self Service is Jan. 12th.
- Last day to drop classes via MyCoyote Self Service is Jan. 29th; **if you wish to drop the course it is your responsibility to formally withdraw from class via My Coyote Self Service prior to the drop date.**
- Last day of classes is Mar. 19th.

Policies

- In accordance with university rules, students may be required to show a picture I.D. at any time during the quarter.
- The student is responsible for all material covered in class and for all announcements made therein.
- Copies of the syllabus and some handouts may be found on the course BlackBoard site. It is your responsibility to check them out before you come to each class meeting.
- Although you may work together with classmates, you should write up your answers independently. Cases of plagiarism may be referred to the Office of Judicial Affairs for disciplinary action. See the Academic Regulations section of the course catalog [http://catalog.csusb.edu](http://catalog.csusb.edu) and look up Plagiarism and Cheating.
- If you are in need of an accommodation for a disability in order to participate in this class, please contact Services to Students with Disabilities at UH-183, (909)537-5238.
- No food is allowed in the classroom.

Disclaimer

It is the student’s responsibility to know all of the information contained in this syllabus. Any changes to the syllabus and course calendar will be announced in class. Students are responsible for these changes whether in attendance or not. It is also the student’s responsibility for reviewing the college policies included in the college catalog and the student handbook.

Caveats

This syllabus may be modified by the instructor in order to better meet students’ needs and progress. Notification of any changes will be made in class as well as through the Blackboard Announcements page and/or the Blackboard email feature. Students are responsible for monitoring all announcements.

*The instructor reserves the right to make changes to the syllabus*