MAT 125 – Calculus A

Contact Information

Teacher: Owen Yael Mireles Briones

Teacher's Mail: owen.mirelesbriones@stonybrook.edu

Office Hours: Thursdays 4:30 pm – 5:30 pm

My office is in room S240A, which is in the basement floor of the Math Building.

If you need more help with the course's material, there is the MLC (Math Learning Center), located also in the basement floor. The MLC hosts different tutors who are willing to help you on your math doubts. It is free; you can just walk in, without previous notice.

For more information, visit: http://www.math.stonybrook.edu/mlc/

Grading

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Homework</td>
<td>25%</td>
<td>Every two classes a homework will be issued.</td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
<td>At the beginning of each class there will be a quiz.</td>
</tr>
<tr>
<td>Midterm</td>
<td>25%</td>
<td>July 25th – During class.</td>
</tr>
<tr>
<td>Final</td>
<td>30%</td>
<td>August 15th – During class.</td>
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Textbook

Homework problems will be retrieved from the book


by James Stewart

You DO NOT need to buy this book.

Course Calendar (Course Syllabus)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/08</td>
<td>Precalculus Review: Practice Exercises</td>
</tr>
<tr>
<td>07/10</td>
<td>Precalculus Review: Trigonometric Functions</td>
</tr>
<tr>
<td>07/11</td>
<td>Precalculus Review: Exponentials and logarithms</td>
</tr>
<tr>
<td>07/15</td>
<td>Limits 1 (Definition, some examples)</td>
</tr>
<tr>
<td>07/17</td>
<td>Limits 2 (Different types of limits, more examples)</td>
</tr>
<tr>
<td>07/18</td>
<td>First glance at Derivatives (Geometric meaning, examples)</td>
</tr>
<tr>
<td>07/22</td>
<td>Derivatives of Polynomials and Exponentials</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
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<tr>
<td>07/24</td>
<td>The Product and the Quotient Rules</td>
</tr>
<tr>
<td>07/25</td>
<td>Midterm Exam</td>
</tr>
<tr>
<td>07/29</td>
<td>Chain Rule</td>
</tr>
<tr>
<td>07/31</td>
<td>Implicit Differentiation</td>
</tr>
<tr>
<td>08/01</td>
<td>Derivatives of Trigonometric and Inverse Trigonometric Functions</td>
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<tr>
<td>08/05</td>
<td>Derivatives of Logarithmic Functions</td>
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<tr>
<td>08/07</td>
<td>Linear Approximations and Differentials</td>
</tr>
<tr>
<td>08/08</td>
<td>Maxima &amp; Minima</td>
</tr>
<tr>
<td>08/12</td>
<td>Applications of Differential Calculus (Sketching and L'Hopital's Rule)</td>
</tr>
<tr>
<td>08/14</td>
<td>Applications of Differential Calculus (Optimization Problems)</td>
</tr>
<tr>
<td>08/15</td>
<td>Final Exam</td>
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</tbody>
</table>

**Americans with Disabilities Act**

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation are confidential. Students requiring emergency evacuation are encouraged to discuss their needs with their professors and DSS. For procedures and information, go to: http://www.ehs.sunysb.edu and look at Fire Safety and Evacuation and Disabilities

**Academic Integrity**

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person’s work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/

**Critical Incident Management**

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students’ ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.

**Conduct**

Stony Brook University expects students to maintain standards of personal integrity that are in harmony with the educational goals of the institution; to observe national, state, and local laws and
University regulations; and to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students’ ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.