

**171**  
**Calculus 1**  
**Summer I**  
**CRN 20457**  
**TWR, 6:00 – 9:20**

**Room: 330**

**171 Calculus 1  
Syllabus**

**Book:** James Stuart. Calculus. Early Transcendentals. Sixth Edition.  
171, Special edition for the community college of Philadelphia  
Cengage I Learning  
ISBN-13: 978-1-4266-3478-9  
ISBN-10: 1-4266-3478-1

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**Office:** Main campus - B2 – 25J, NE campus – 326

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[akitover@hotmail.com](mailto:akitover@hotmail.com)

**Web Page:** <http://faculty.ccp.edu/FACULTY/akitover>

The web page contains the syllabus, the reviews with detailed solutions, and  
MAPLE attachments.

**Phone:** (215) 751-8723

**Contents:** Chapters 1 - 5  
Limits, Derivatives, Transcendental functions, Applications of  
derivative. Antiderivatives and definite integrals.  
Appendix (provided):  
Applications of Taylor and Maclaurin polynomials.

**Tests:**

Test 1. Limits.  
40 points with possibilities for extra credit.

**Test 2. Rules of differentiation.  
40 points with possibilities for extra credit.**

**Test 3. Graphing problems. Applied minimum and maximum problems, Newton's method, L'Hospital's Rule. Linear and quadratic approximation, Taylor polynomials.  
60 points with possibilities for extra credit.**

**You will need a scientific calculator for test 3.**

**Departmental final – 100 points.**

**Grading: Average of all tests.**

<b>A</b>	<b>90%-100% (216 – 240 points)</b>
<b>B</b>	<b>80%-89% (192 – 215 points)</b>
<b>C</b>	<b>70%-79% (168 – 191 points)</b>
<b>D</b>	<b>60%-69% (144 – 167 points)</b>
<b>F</b>	<b>Less than 60% (less than 144 points).</b>

**No matter what is your average, you will not get an “A” or a “B” if you get less than 50% or 40%, respectively, on the departmental final.**

**Only students with good attendance record will be entitled to make ups (if necessary).**

**If you miss a test I will give you a possibility to take it only if you have a valid and documented excuse.**

**Please, no food in the class room.**

**Put your cell phones in the vibration mode before the class starts.  
No cell phones during a test!**

**What you have to repeat from precalculus.  
(Chapters' numbers are given for the book of Larsen and Hostetler “Algebra and Trigonometry”, the fifth edition. You can use any other precalculus textbook).**

**Chapter 2. Functions and their graphs (functions, graphs, translations and combinations, compositions, inverse functions).**

**Chapter 5. Exponential and logarithmic functions and their graphs, properties of logarithms.**

**Chapter 6. Angles and their measure. Graphs of basic trigonometric functions.**

**Chapter 7. Trigonometric identities. Sum and difference formulas. Trigonometric equations.**

### **Recommended Homework**

**The numbers of Sections, Pages, and Problems are given from Stewart, Early Transcendentals, Sixth Edition**

<b>Section</b>	<b>Page (Pages)</b>	<b>Problems</b>
<b>1.1</b>	<b>13, 14</b>	<b>39, 57</b>
<b>1.2</b>	<b>25, 26</b>	<b>1, 9</b>
<b>1.3</b>	<b>35, 36</b>	<b>35, 39, 43</b>
<b>1.4</b>	<b>49</b>	<b>15, 16</b>
<b>1.5</b>	<b>62, 63</b>	<b>21, 23, 25, 35, 61, 63</b>
<b>2.2</b>	<b>89</b>	<b>21, 23</b>
<b>2.3</b>	<b>97 – 99</b>	<b>7, 17, 23, 29, 51, 55</b>
<b>2.4</b>	<b>109</b>	<b>25, 29</b>
<b>2.5</b>	<b>119</b>	<b>17, 19</b>
<b>2.6</b>	<b>132, 133</b>	<b>19, 23, 29, 33, 35, 43</b>
<b>2.7</b>	<b>141 - 143</b>	<b>5, 29, 33, 35</b>
<b>3.1</b>	<b>171 – 172</b>	<b>7, 15, 23, 29, 31, 49, 65, 75</b>
<b>3.2</b>	<b>178 – 180</b>	<b>3, 5, 13, 29, 51</b>
<b>3.3</b>	<b>186 - 187</b>	<b>5, 9, 15, 39 – 47</b>
<b>3.4</b>	<b>194 – 195</b>	<b>9, 17, 35, 45</b>
<b>3.5</b>	<b>204 – 205</b>	<b>11, 19, 29, 37</b>
<b>3.6</b>	<b>211</b>	<b>7, 11, 39, 43, 47</b>
<b>3.7</b>	<b>221 – 224</b>	<b>1, 13, 33</b>
<b>3.9</b>	<b>236 – 238</b>	<b>5, 17, 25, 33</b>

<b>3.10</b>	<b>243 – 244</b>	<b>23, 35, 37</b>
<b>4.1</b>	<b>269</b>	<b>49, 53, 57, 61</b>
<b>4.4</b>	<b>295 – 296</b>	<b>17, 21, 35, 47, 57, 61</b>
<b>4.5</b>	<b>305</b>	<b>15, 27, 37, 49</b>
<b>4.7</b>	<b>319 – 325</b>	<b>13, 19, 25, 39, 65</b>
<b>4.8</b>	<b>330</b>	<b>23, 39</b>
<b>4.9</b>	<b>336</b>	<b>19, 33, 39, 41</b>
<b>5.3</b>	<b>379</b>	<b>27, 37, 41</b>
<b>5.5</b>	<b>397 – 398</b>	<b>3, 11, 33, 55, 69</b>