Math 122: Calculus II (CRN 19099)

Fall 2008

Instructor: Rachel Dunwell

Office: 319 Ohlendorf Hall
Office Phone: x3724
E-mail: dunwellr@rhodes.edu
Office Hours: MWF 1pm – 2pm and 3pm – 5pm, by appointment or just call in.

Course Description: Calculus provides powerful tools for modeling real world problems. Students will have a deep understanding of the materials, not only computations. Many proofs will be discussed in class that will give students some ideas about how the system of calculus is built up. We will stress concepts and theorems. It is very important that the student spend time carefully reading the text, with special attention being paid to the definitions and theorems.

The course material is taken from chapters 5, 6, 7, 8 and 9 of the text. It starts with the definition of a Riemann integral, goes on to show the student how to use many techniques of integration that exist, including how to use computer algebra systems. Applications of integration are also studied including how to solve first order differential equations, how to calculate volumes, surface areas and arc lengths. Infinite series are studied in detail and the students will learn how to represent many functions as a power series, and develop an appreciation of when this is and is not possible.

Homework: Will be assigned after every lecture that contains new content (generally every MWF) all three assignments and any additional credit assignments will be due at 5pm on the following Wednesday.

Tests: will be 50 minutes long and consist of problems similar to the problems assigned since the previous test (or, in the case of the first test, the beginning of the course). The test dates are September 23rd, October 14th, and November 25th.

Report: The lectures from October 28th to November 3rd inclusively, will be devoted to an extended self study project. The report of this work will be due at 5pm Wednesday November 5th.

Final Exam: Will be cumulative, and is on Friday December 12th at 5:30pm.

Attendance: The College's attendance policy will be followed. Absence from any lecture, in addition, for any reason, will be loose you the attendance credit for that
lecture. Additional credit assignments, however, will be assigned every week which will have the same credit value as attendance at one lecture.

**Grades:** The grade breakdown is as follows

- **Homework:** 34%;
- **Self Study Report:** 10%;
- **Tests:** 21% (7 each);
- **Attendance:** 10%
- **Final exam:** 25%;

**Total:** 100%.

The grade scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>&lt;60</th>
<th>60-62</th>
<th>63-66</th>
<th>67-69</th>
<th>70-72</th>
<th>73-76</th>
<th>77-79</th>
<th>80-82</th>
<th>83-86</th>
<th>87-89</th>
<th>90-92</th>
<th>93-100</th>
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<tbody>
<tr>
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<td>C-</td>
<td>C</td>
<td>C+</td>
<td>B-</td>
<td>B</td>
<td>B+</td>
<td>A-</td>
<td>A</td>
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**Tutoring:** Peer Tutors are on duty every evening from 7pm to 9pm. The full schedule is:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Tutor</th>
<th>Tutor's Email</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td>7pm – 9pm</td>
<td>Josh Fuchs</td>
<td><a href="mailto:fucjt@rhodes.edu">fucjt@rhodes.edu</a></td>
<td>MSC</td>
</tr>
<tr>
<td>Monday</td>
<td>7pm – 9pm</td>
<td>Bradford Taylor</td>
<td><a href="mailto:taybp@rhodes.edu">taybp@rhodes.edu</a></td>
<td>MSC</td>
</tr>
<tr>
<td>Tuesday</td>
<td>7pm – 9pm</td>
<td>John Schulte</td>
<td><a href="mailto:schjm@rhodes.edu">schjm@rhodes.edu</a></td>
<td>MSC</td>
</tr>
<tr>
<td>Wednesday</td>
<td>7pm – 9pm</td>
<td>Whitney DuVal</td>
<td><a href="mailto:duwr@rhodes.edu">duwr@rhodes.edu</a></td>
<td>MSC</td>
</tr>
<tr>
<td>Thursday</td>
<td>7pm – 9pm</td>
<td>Josh Fuchs</td>
<td><a href="mailto:fucjt@rhodes.edu">fucjt@rhodes.edu</a></td>
<td>MSC</td>
</tr>
</tbody>
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**Honor Code:** The student is expected to conduct him or herself within the guidelines of the College’s Honor Code.