

Homework Assignments
365 MATH 384 - 01
Partial Differential Equations
Spring 2004
Dr. Goutziers

Text: **Fourier Series and Boundary Value Problems**
Author: **James Ward Brown, Ruel V. Churchill**
Publisher: **McGraw-Hill**
Edition: **Sixth**
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Office Hours: **M 10:00 am W 11:00 am Th 12:00 pm F 12:00 pm**

Assignment	Date
1) Show that the boundary value problem $u''(x) + u(x) = -1$ $u(0) = 0, u'\left(\frac{\pi}{2}\right) = 1$ has no solution.	Jan 21
2) Page 8 1; 3.	Jan 23
3) Page 15 7.	Jan 26
4) Page 15 2; 3; 4.	Jan 30
Announcement of Quiz 1	Jan 31
Date: Friday, February 6	
Sections: 1-4, 6, 7.	
Location: Fitzelle Hall 215	
5) Page 20 1; 2; 5.	Feb 02
6) Page 23 3; 4.	Feb 04
7) Page 29 4.	Feb 09
8) Page 30 5; 6.	Feb 11
9) Page 39 1.	Feb 13
Announcement of Test 1	Feb 16
Date: Friday, February 20	
Sections: 1-4, 6-13.	
Location: Fitzelle Hall 215	
10) Page 39 4; 5; 9.	Feb 16
11) Page 47 1; 2.	Feb 27
In Problem 2, choose $f(x) = x(x - \pi)^2$, compute the coefficients A_n , and use a partial sum of 50 terms to plot the solution $u(x, y)$.	
Announcement of Quiz 2	Mar 08
Date: Friday, March 12	
Sections: 14-17	
Location: Fitzelle Hall 200 (Math-CS-Stat Lab)	
12) Page 53 4; 5. (continued on the next page)	Mar 08

In Problem 4 take $f(x)=x(1-x)$ and use a partial sum of 50 terms to plot the solution on the rectangle $\{(x,y)|0\leq x\leq 1,0\leq y\leq 2\}$.

13) Page 64	2; 3; 4; 6.	Mar 19
Announcement of Test 2		Mar 22
Date:	Friday, March 26	
Sections:	14-17, 19-22	
Location:	Fitzelle Hall 200 (Math-CS-Stat Lab)	
14) Page 65	8; 9.	Mar 22
15) Page 72	1; 4; 5; 7.	Mar 29
16) Page 81	1; 3; 4; 6.	Mar 31
17) Page 83	8	Apr 14
	Page 97 10; 11.	
Announcement of Quiz 3		Apr 18
Date:	Friday, April 23	
Sections:	23-31	
Location:	Fitzelle Hall 200 (Math-CS-Stat Lab)	
18) Page 97	14	Apr 19
19) Page 96	5; 6(b).	Apr 21
20) Page 128	6	Apr 26
21) Page 133	2; 3.	Apr 30
Announcement of Test 3		May 03
Date:	Friday, May 7	
Sections:	23-33, 39-42	
22) Page 141	2.	May 03