

**BCMB 8020 Spring 2006**  
C127 Life Sciences Building  
Tuesdays & Thursdays (12:30-3:15)

**Carbohydrates: Structure, Function, Biosynthesis**

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**Important Information!!**

You will be asked to carry out several “in class” activities in a group. You should use the same groups that you used with Dr. Schmidt. To confirm the groups, you will be asked to give Dr. Mohnen a list of all group members before the end of class on Thursday, April 6.

**Due before class, April 11**

1. **Read Chapter 7: pages 356-381** and **Chapter 23 pages 852-862** in the class text (Biochemistry, third Edition by Voet and Voet, 2004, Wiley).
2. **Read** the articles by Rudd *et al.*, 2004; Shearer and Graham (2004); and James *et al.*, 2003. These articles will be given out in class. Pdf files of additional optional articles can be found on the website <http://cell.ccrc.uga.edu/~dmohnen/bcmb8020/list.html>
3. Required PDF files will be available on the website at least two days before class (<http://cell.ccrc.uga.edu/~dmohnen/bcmb8020/list.html>). Be sure to check the web site regularly.

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Apr 6	<b>CARBOHYDRATES: General Review</b>
Apr 6	Overview
Apr 11	Analytical methods / Energy & storage carbohydrates
Apr 11	Starch / Glycogen
Apr 13	Nucleotide sugars / carbohydrate transport / glycosyltransferases
Apr 13	<i>N</i> -linked Glycoproteins / biosynthesis
Apr 18	<i>O</i> -linked Glycoproteins / biosynthesis
Apr 18	Glycosaminoglycans and proteoglycans
Apr 20	Extracellular nonstandard <i>O</i> -glycans / congenital muscular dystrophy (Lance Wells)
Apr 20	Intracellular <i>O</i> -glycans in disease / diabetes (Lance Wells)
Apr 25	Bacterial cell wall and function (Russell Carlson)
Apr 25	Fungal cell wall polysaccharides
Apr 27	Plant cell wall polysaccharides
Apr 27	Bioactive oligosaccharides/carbohydrate-protein interactions
May 4	<b>FINAL EXAM (12:00-3:00; covers lectures April 6-27)</b>