

PHYS/ASTR 515 and 516: Acquiring MTW

The campus bookstore reports that the required course textbook, Misner, Thorne and Wheeler *Gravitation* (MTW), is temporarily out of print and is being reprinted. Since that reprinting won't take place until well after the semester begins, students are encouraged to try other options to obtain access to the original edition. There are many UIUC students in Physics and Astronomy who took the course and they may be willing to lend MTW to you. Note that the other required book, Lightman et al., *The Problem Book in Relativity and Gravitation*, is available and can be purchased at the campus book store. Other options for obtaining MTW include the following:

I. Purchasing the Book

Go to major shopping websites such as Amazon.com to purchase the textbook. Links for MTW and the other required textbook, the Problem Book in Relativity and Gravitation, on Amazon are given below:

MTW: https://www.amazon.com/Gravitation-Charles-W-Misner/dp/0691177791/ref=sr_1_1?ie=UTF8&qid=1502912631&sr=8-1&keywords=gravitation

Problem Book: https://www.amazon.com/Problem-Book-Relativity-Gravitation-Lightman/dp/069108162X/ref=sr_1_1?s=books&ie=UTF8&qid=1502912672&sr=1-1&keywords=problem+book+in+relativity+and+gravitation

II. Borrowing the Book

a) from the Engineering Library (Grainger)

Students can go to Grainger Library on campus to read MTW, but all copies are on reserve and cannot be checked out. A full list of reserved books for the course is shown below:

521.12m69g1973 Misner/ Thorne/ Wheeler (MTW); Gravitation (7 copies)
530.11W142G Wald; General Relativity
530.11P756R Poisson; A Relativist's Toolkit: The Mathematics of Black-Hole Mechanics
523.1P313C Peacock; Cosmological Physics
530.11C236S Carroll, Sean M.; An Introduction to General Relativity: Spacetime and Geometry
[not available yet]
Online Resource Baumgarte, T.W., Shapiro, S.L.; Numerical Relativity and Compact Binaries,
Physics Reports
530.11B327n Baumgarte, Thomas W. & Shapiro, Stuart L.; Numerical Relativity: Solving
Einstein's Equations on the Computer
530.11Sch88f2009 Schutz, Bernard F.; First Course in General Relativity, 2nd Edition
530.11P9421979 Lightman, Alan P. [et al]; Problem Book in Relativity and Gravitation, 2nd
Edition

b) from other libraries in the UIUC system

Every UIUC student has the benefit of borrowing textbooks from most Illinois state universities and colleges. Here is a short instruction guide for accessing MTW (or any other book).

1. Go to <https://vufind.carli.illinois.edu/all/vf/> and login. First time users need to register by providing the netid and **library ID**, which is printed on the icard, above the UIN.

2. Once logged in, search the book you would like to borrow. For example, "Misner Gravitation".
3. Then search and click on the desired item and jump to the page with the book's description and availability. Notice that the first several choices are U of I libraries which are "temporarily reserved". This means you can't access to them online but you can go to those libraries and get walk-in service.
4. Scroll down, one can see all the universities with available copy of the selected book. Click "location and availability" to see how many copies are stored in this location, if it is > 0 , click "Request this item".
5. Then choose a location to pick it up. The book will be delivered in 3-5 business days and you can check its status on this website. Remember to bring the I-card when pick it up. **So far there are ~ 75 MTWs available across the state**, which should be enough for the course
6. Usually, the book has 1-month rental period, but it can be extended multiple times and span the entire semester. To do so, go to the "Requested items" in the second picture and select your item to extend the rental period.

III. Other Options

See the TA for other options that may exist.