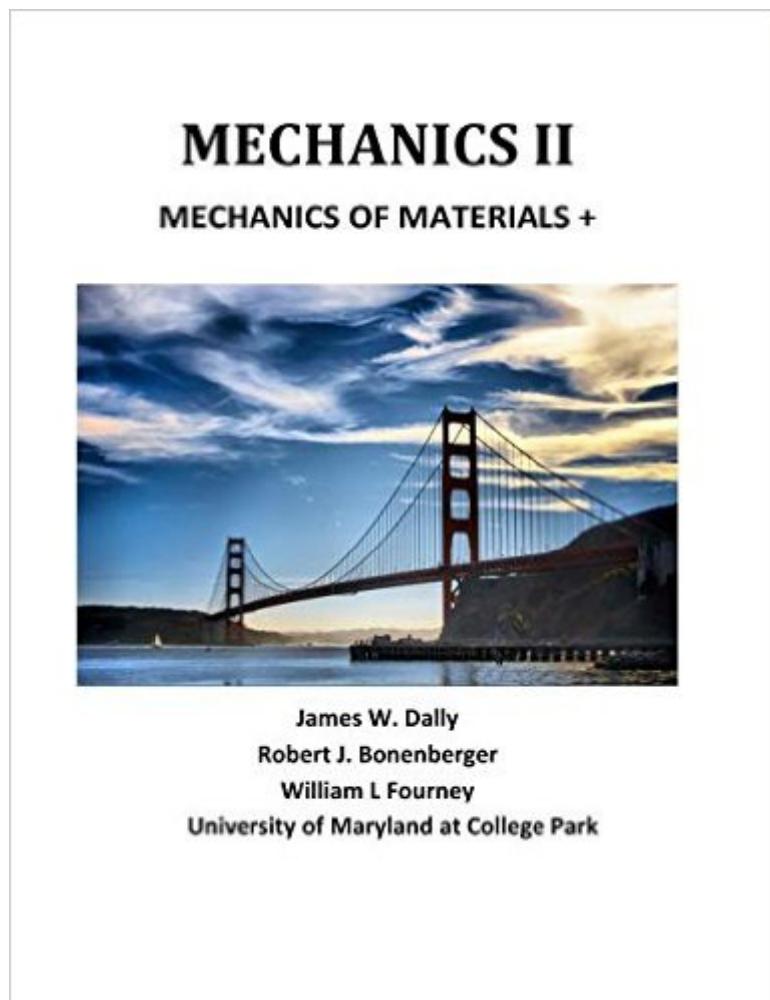


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# Mechanics II: Mechanics Of Materials

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## Synopsis

This book is one of the two textbooks that support an integrated course offering for Statics and Mechanics of Materials. Hopefully the integration of the topics of these two closely related courses will make the learning experience for the students easier and more meaningful. The content in the Mechanics II (Mechanics of Materials) is a revision of a part of the content in a book titled Design Analysis of Structural Elements published several years ago. The book titled Design Analysis of Structural Elements was too long and too heavy. It required a supplement for the homework exercises. The textbook for Mechanics I (Statics) published in 2013 was also drawn from part of the content in Design Analysis of Structural Elements. Both, Statics ++ and Mechanics of Materials + published in 2015, have been revised by reorganization of materials based on reactions of instructors and students. The Statics course provides the first exposure of engineering students to the study of mechanics. While Statics is a relatively simple subject, many students find it difficult, and they often perform far below our expectations. In an effort to improve the curriculum, the Keystone instructors at the University of Maryland have been working to enhance the student's learning experience when studying the courses in mechanics. The Statics ++ and Mechanics of Materials + textbooks indicate some of the changes in the philosophy adopted by the faculty, when presenting the subject matter traditionally offered in introductory mechanics courses.

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