

**Location:**

Duderstadt Center  
 University of Michigan  
 2281 Bonisteel Blvd.  
 Ann Arbor, MI 48109

**Tuition:** \$540.00

**Faculty:**

The program will be presented by University of Michigan faculty and staff\*.

**Don B. Chaffin, Ph.D.**

**Randall A. Rabourn, M.S., CSP, CPE**

**Sheryl S. Ulin, Ph.D., CPE**

**Charles B. Woolley, M.S., CPE**

**Registration:**

Pre-registration is required and will be accepted on a first-come, first served basis. The fee covers course materials, break refreshments and lunch on the first day of the program. Cancellation notification must be received no later than April 24, 2008 in order to qualify for a refund, less a \$50 administrative fee. Substitute attendees are welcome. In the unlikely event that the program must be cancelled, the entire submitted registration fee will be refunded without further liability on the part of the organizers. Telephone registrations are accepted conditionally upon the receipt of a completed registration form with payment.

For more information and to register online:  
[www.umcohse-programs.org](http://www.umcohse-programs.org)

**Hotel Accommodations:**

A limited number of hotel rooms are being held at a special rate (\$92/night) at the Holiday Inn near the University of Michigan, 3600 Plymouth Road. Please contact the hotel directly by April 15 at (800)800-5560 or (734)769-9800 to reserve a room. Attendees are responsible for making their own hotel arrangements and payment.

Look for upcoming program announcements at  
<http://www.umcohse-programs.org>

Center for Occupational Health and Safety Engineering  
 1205 Beal Avenue—IOE Building  
 Ann Arbor, MI 48109-2117

**The Regents of the University**

Julia Donovan Darlow (Ann Arbor), Laurence B. Deitch (Bingham Farms), Olivia P. Maynard (Goodrich), Rebecca McGowan (Ann Arbor), Andrea Fischer Newman (Ann Arbor), Andrew C. Richner (Grosse Pointe Park), S. Martin Taylor (Grosse Pointe Farms), Katherine E. White (Ann Arbor), Mary Sue Coleman (*ex officio*)

Look for upcoming program announcements at  
<http://www.umcohse-programs.org>

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# ERGONOMICS WORKSHOP: USING THE 3D STATIC STRENGTH PREDICTION PROGRAM™

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**Duderstadt Center  
 The University of Michigan  
 Ann Arbor, MI  
 May 8-9, 2008**

*presented by:*



The University of Michigan is an Education and Research Center funded by the National Institute for Occupational Safety and Health.

# USING THE 3D STATIC STRENGTH PREDICTION PROGRAM™

## AGENDA\*

### Thursday, May 8th

- 8:15am Introduction  
*Randy Rabourn*  
*Chuck Woolley*
- 8:30 Getting Started and Operational Overview  
*Chuck Woolley*
- 9:30 Break
- 9:45 Anthropometry  
*Sheryl Ulin and Chuck Woolley*
- 10:45 Biomechanical Basis of the 3DSSPP  
*Don Chaffin*
- 11:45 Lunch
- 12:45 Software Exercise: Posture  
*Chuck Woolley*
- 2:00 Software Exercise: Force  
*Chuck Woolley*
- 2:15 Break
- 2:30 Hands-On Exercise: Reach  
*Supervised by course instructors*
- 3:00 Biomechanical Computations Related to Strength  
*Randy Rabourn and Chuck Woolley*
- 4:00 Hands-On Exercise: Strength Case Study  
*Supervised by course instructors*
- 4:30 Adjourn

### Friday, May 9th

- 8:00am Biomechanical Computations Related to Low Back Spine Compression  
*Randy Rabourn and Chuck Woolley*
- 8:45 Balance Considerations  
*Sheryl Ulin*
- 9:00 Hands-On Exercise: Spine Compression Case Study  
*Supervised by course instructors*
- 9:30 3D Static Strength Prediction Program in Practice  
*Sheryl Ulin*
- 9:45 Break
- 10:00 Motion and Additional Features of the 3DSSPP  
*Chuck Woolley*
- 11:15 Hands-On Exercise: Case Studies and Discussion  
*Supervised by course instructors*
- 11:45 Adjourn

\* Program faculty and agenda subject to revision

**Registration Form** (or register online at [www.umcohsse-programs.org](http://www.umcohsse-programs.org))  
**USING THE 3D STATIC STRENGTH PREDICTION PROGRAM™**  
Ann Arbor, Michigan - May 8-9, 2008

(Please Print)  
Name: \_\_\_\_\_  
Corporation/Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Title: \_\_\_\_\_  
Highest Degree: \_\_\_\_\_  
Daytime Phone No: \_\_\_\_\_  
FAX No: \_\_\_\_\_  
Email Address: \_\_\_\_\_

**Description:** Manual materials handling activities present significant ergonomic challenges for workers and are associated with many musculoskeletal disorders such as strains, sprains and low back pain. The 3D Static Strength Prediction Program™ (3DSSPPP™) is an ergonomics job analysis and design tool developed by the University of Michigan Center for Ergonomics to quantify biomechanical requirements during manual materials handling tasks. This 1-1/2 day workshop is devoted to training individuals with an ergonomics background to use the computer software and interpret its output.

This workshop will include lectures with reinforcing hands-on computer workshop activities, supervised by course instructors. Biomechanics principles will be reviewed, but this should be refresher information for attendees. Enrollment will be limited to ensure that all attendees will have access to a computer throughout the course. The new (2008) 3DSSPPP™ Version 6 will be used in this workshop.

**Objective:** At the conclusion of this program, the attendee should: know when and where the 3DSSPPP™ can be applied; know what workplace information is needed to use the software and how to collect it; know how to operate the 3DSSPPP™; and be able to interpret the output from the program.

**Who Should Attend:** This course is intended for those who are responsible for the prevention of injuries and illnesses in the workplace, particularly safety and health personnel, industrial hygienists, physicians, nurses, workplace design engineers and management and labor representatives. This is not an introductory level program.

**Accreditation:** 1.0 CEUs and 1.5 ABIH CM points have been awarded for this course.

**Extensive information about the 3DSSPPP™ software, including Version 6 upgrade procedures, can be obtained at [www.umichergo.com](http://www.umichergo.com)**

Please enclose a payment of \$540.00 with your completed form. Make checks payable to the University of Michigan. This fee includes tuition, handouts, break refreshments, lunch on May 8th and all applicable state sales taxes. We accept Visa, Mastercard or American Express.

Mail or FAX registration to:  
University of Michigan COHSE  
1205 Beal Avenue  
Ann Arbor, MI 48109-2117  
FAX: (734)764-3451

(Confirmation will be sent via the email address you provide)

Indicate Profession:  
 Medicine (Physician)  
 Nursing  
 Industrial Hygiene  
 Safety  
 OT/PT  
 Insurance/Workers' Comp  
 Other: \_\_\_\_\_

Type of Credit Card: \_\_\_\_\_  
Credit Card Number: \_\_\_\_\_  
Expiration Date: \_\_\_\_\_  
Name Appearing on Card: \_\_\_\_\_  
Cardholder's Signature: \_\_\_\_\_