DESCRIPTION
This new live video conference class is an overview of the building shell as the primary physical component of any facility which controls energy flow between interior an exterior of the building. The goal is to develop a quantitative and analytical understanding of the thermal performance of major building envelope components. Topics include walls, doors, glazing (windows), roofing and building skin as well as climatic responsive building design.

ON-LINE CLASS FOLDER
www.deanza.fhda.edu/faculty/murphy/es71/

PREREQUISITES
Eligibility for English 100A; Reading 201; ESL 161-163 is advised.

INSTRUCTOR INFORMATION: Steve Murphy
Office Hours Held: From: 5:00 pm – 5:30 pm
Days/Hours: Tuesday evening prior to class
Phone/Voicemail #: (408) 395-6299
FAX Telephone(s): (408) 864-8245, (408) 864-5546
Office Location: LCW 26
E-mail Address: mrph@gte.net

REQUIREMENTS
Be prepared to spend six hours per week attending class and using and studying the course materials.
1. Read over the Online Orientation and submit the Student Information Form by November 12, 2002.
2. Participate in the three three-hour video classes.
3. Complete one three-hour field trip or lab activity (assignment to be announced).
4. Complete all reading assignments.
5. Complete class assignments.
6. Complete activities associated with supplemental lab activity.
7. Complete and turn in Class Journal/Notes as assigned.

OBJECTIVES
After completing the reading assignments and participating in the video programs, you should be able to:
1. Develop a qualitative and analytical understanding of the thermal performance of major building envelope components.
2. Quantify the thermal performance of various envelope assemblies.

3. Understand solar heat gain issues and the design of shading systems.

4. Examine the comfort benefits and energy savings potential of windows.

5. Analyze building insulation, moisture barriers and vapor barriers as the means to control the passage of heat and prevent condensation at the building envelope.

**COURSE MATERIALS**

The course materials for off-campus students will be at: [www.deanza.fhda.edu/faculty/murphy/es71/](http://www.deanza.fhda.edu/faculty/murphy/es71/)
class folder/website location or mailed to each individual broadcast site.

For on-campus students, at the De Anza College Bookstore:
class folder/website location [www.deanza.fhda.edu/faculty/murphy/es71](http://www.deanza.fhda.edu/faculty/murphy/es71) or distributed in class.

**MEDIA COMPONENTS AND AVAILABILITY**

Three (3) three-hour *The Building Envelope* video programs.

**Viewing Options for The Building Envelope video programs.**

1. AT&T subscribers may view the class live on CCN1.
2. A videotape of the class may be made for later viewing.
3. On-site (De Anza) Students check out tapes from the Open Media Lab to view overnight at home.
   - SMART DASB Card required. The Smart Card Office is located in the lobby of the Administration building (408-864-5551).
   - DLC ID Card required (available at the De Anza College Distance Learning Center, LCW-102).
   - One tape at a time may be checked out for 3 days.
   - Return tapes to Open Media Lab or in the drop box outside of Learning Center West (please report any videotape technical problems).
   - Late fines: $2.00/day (maximum fine-$25.00); replacement/lost tape charge: $50.00/tape.

**STUDY EACH WEEK’S ASSIGNMENTS**

The course content comes from the teleclasses and assigned readings. Your activities will from both the readings and video programs. If, for any reason, you miss a video program during the assigned week, you should still keep current with your reading assignments.

**Work on the lessons in the following order:**

a. Read the textbook assignment (prior to the class).

b. Participate in the video conference lecture:
   1) at your receive site, or
   2) on videotape in the Media Lab, in the De Anza Learning Center, or
   3) on videotape checked out from the Media Lab (limited copies) to view at home.

c. Complete any required written assignments (see the Assignment Schedule).

**COMPLETE THE WRITTEN ASSIGNMENTS**

1. **Homework Assignments:** There is 1 homework assignment and a final “Building Envelope Analysis” project. Student “Class Journals/Folders” also need to be turned in for credit. The due dates for each assignment are listed in your lecture schedule.
2. **Lab Activity:** Your lab is scheduled (Thursday; Nov 21st @ 3 PM); it will be a field trip to the IBEW Union Hall building in San Jose to look at their sustainable building and experience the different “Building Envelope” upgrades that they have integrated into the building.

**Submitting Assignments:** [copy and attach the cover sheet on the last page of this syllabus]:
- Turn in your paper at the Distance Learning Center, room LCW-102. During regular hours drop them into the Homework Drop Box inside the office and sign in your name on the "Student Coursework Sign-In-Sheet" so there is a record of your paper being turned in there. After hours, drop them into the Homework Drop Box located by the Distance Learning Center back door (facing the California History Center).
- Mail your paper to: Julie Phillips, De Anza College Distance Learning Center, 21250 Stevens Creek Blvd., Cupertino, CA 95014
- FAX your paper to either of the two Distance Learning Center FAX machines: (408) 864-5546, or (408) 864-8245.

Graded homework is returned for **On-campus Students** to the DL Center for distribution about 7–10 days after its due date. Please present your DASB Photo ID to the Distance Learning Center staff to retrieve your work. **Off-campus Students** send a self-addressed, stamped envelope along with your assignment and your homework will be returned.

**TESTING AND GRADING**

**Final Grading and Point Breakdown:**

<table>
<thead>
<tr>
<th>Points Breakdown</th>
<th>GRADING SCHEDULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class attendance/participation</td>
<td>A 90 – 100%</td>
</tr>
<tr>
<td>Homework 1</td>
<td>B 80 – 89%</td>
</tr>
<tr>
<td>Lab Activity Report</td>
<td>C 70 – 79%</td>
</tr>
<tr>
<td>Class Journal/Folder</td>
<td>D 60 – 69%</td>
</tr>
<tr>
<td>Final Presentation/Report</td>
<td>F 59% &amp; below</td>
</tr>
</tbody>
</table>

**Total Points** 100 points

**Policy on Copying and Cheating:**

*Students who submit the work of others as their own or cheat on exams or other assignments receive a failing grade in the course and are reported to college authorities.*

You may access your final grades through the Star System [408-777-9394 or 650-917-0509] or the Internet [https://regserv.fhda.edu/da-grades.html].