

## MSE 426: Senior Thesis II

<i>Course description:</i>	Research in materials science and engineering
<i>Number of credits:</i>	3 (0-9)
<i>Course Coordinator:</i>	Jinwen Zhang
<i>Prerequisites by course:</i>	MSE 320; MSE 323, senior standing; certified major in Materials Science & Engineering
<i>Prerequisites by topic:</i>	<ol style="list-style-type: none"><li>1. Metallographic preparation methods</li><li>2. Optical microscopy</li><li>3. Scanning electron microscopy</li></ol>
<i>Postrequisites:</i>	None
<i>Textbooks/other required materials:</i>	None
<i>Course objectives:</i>	<ol style="list-style-type: none"><li>1. To obtain first-hand experience with research in the field of materials science and engineering.</li></ol>
<i>Topics covered:</i>	Independent research
<i>Expected student outcomes:</i>	Each student will be assessed on the following points: <ol style="list-style-type: none"><li>1. Defining a research project.</li><li>2. Identifying equipment and facilities necessary to carry out the project.</li><li>3. Becoming aware of the available literature in your field of study.</li><li>4. Designing and carrying out experiments.</li><li>5. Obtaining and analyzing results/data.</li><li>6. Preparing a senior thesis.</li><li>7. Presenting your thesis to the faculty.</li><li>8. Publishing a paper in a recognized journal or conference proceedings (<i>optional</i>).</li></ol>
<i>Class schedule:</i>	None
<i>Laboratory schedule:</i>	Two 3-hour laboratory sessions per week, for one academic year.
<i>Contribution to meeting the professional component:</i>	Engineering Topics
<i>Relationship of course to program objectives:</i>	Meets: <ol style="list-style-type: none"><li>1. School of MME educational objectives: 1, 2, 3</li><li>2. ABET, Criterion 3 program outcomes: 1, 3, 4, 5, 6</li><li>3. School of MME MSE program outcomes: 1, 3, 4, 5, 6, 10, 11</li></ol>
<i>Prepared by:</i>	Andrea Butcherite and Dr. Jinwen Zhang
<i>Date:</i>	May 30, 2018

### POLICIES

#### A. Reasonable Accommodation (the nature of the particular course determines which one applies):

- **Pullman Campus.** Reasonable accommodations are available for students with a documented disability. If you have a disability and need accommodations to fully participate in this class, please either visit or call the Access Center (Washington Building 217; 509-335-3417) to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center.
- **WSU Online Course.** Reasonable accommodations are available in online classes for students with a documented disability. All accommodations must be approved through your WSU Disability Services office. If you have a disability and need accommodations, we recommend you begin the process as soon as possible. For more information contact a Disability Specialist on your home campus: Pullman or WSU Online (<http://accesscenter.wsu.edu>), Spokane (<http://spokane.wsu.edu/students/current/studentaffairs/disability/>), Tri-Cities (<http://www.tricity.wsu.edu/disability>), Vancouver (<http://studentaffairs.vancouver.wsu.edu/student-resource-center/disability-services>).

**B. Academic Integrity**

WSU expects all students to behave in a manner consistent with its high standards of scholarship and conduct. Students are expected to uphold these standards both on and off campus and acknowledge the university's authority to take disciplinary action. The Standards of Conduct for Students can be found at <http://conduct.wsu.edu>.

**C. WSU Safety**

WSU is committed to maintaining a safe environment for its faculty, staff, and students. Safety is the responsibility of every member of the campus community and individuals should know the appropriate actions to take when an emergency arises. In support of our commitment to the safety of the campus community the University has developed a Campus Safety Plan, <http://safetyplan.wsu.edu>. It is highly recommended that you visit this web site as well as the University emergency management web site at <http://oem.wsu.edu/> to become familiar with the information provided.