LCSEE Graduate Seminar

Seminar #1: Course Policies and Graduate Program Overview

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1. **Course Mechanics**
   - Objective and requirements of this class.
   - Course policies.
   - Using eCampus to track attendance.

2. **LCSEE Graduate Programs**
   - The M.S. program and its requirements.
   - The department’s 5 areas of concentration.
   - The Ph.D. program and qualifying exam.

3. **Conclusions**
Outline

1 Course Mechanics
   - Objective and requirements of this class.
   - Course policies.
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2 LCSEE Graduate Programs
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3 Conclusions
Course Objective

- The objective of the LCSEE graduate seminar is *to broaden the views of LCSEE graduate students regarding technical and professional topics related to electrical and computer engineering and computer science.*

- The objective will be met by having guest speakers give talks on a variety of subjects.
Course Requirements

- The class is graded on a P/F scale:
  - P is *passing*.
  - F is *failing*.

- Be aware that an “F” will negatively impact your GPA.

- To earn a P you must:
  - Attend at least *seven* (7) seminars.
  - Submit *assessments* into *eCampus* for each seminar you attended.

- You may get credit for today\(^1\), so you only have 6 left!

- You are encouraged to attend more than just the minimum number of seminars.

\(^1\)Yes, you do need to submit an assessment of today’s seminar in order to receive credit for it.
Registration FAQ

- How many semesters of seminar should you take?
  - 2 semesters for M.S. Thesis.
  - 1 semester for M.S. Problem Report or Coursework.
  - 2 semesters total for Ph.D. (including what was taken for a WVU M.S.)

- What section?
  - Section should match your academic major: EE, CPE, or CS.
  - If you are a M.S. student, then don’t register for CPE 796.

- What grading option?
  - Register for the *normal* grading option.
  - Do **not** select the *audit* option.
Official vs. Unofficial Seminars

- **Official** LCSEE seminars:
  - Normally held during the scheduled time and room.
    - Sometimes, will be held at an alternate time and location.
  - A seminar is *official* if and only if it is listed in eCampus under *assessments*.
    - It will also appear in eCampus on the *calendar*.
    - As a courtesy, I will post the abstract and speaker bio on my webpage.
    - Subscribe to the RSS feed to get announcements.
  - At least **four** (4) of the seminars you attend must be official seminars.
    - Today counts as an official seminar if you submit an assessment.
    - Must complete the eCampus assessment within one week to get credit.

- **Unofficial** seminars:
  - Not listed in eCampus as an assessment or calendar event.
  - You will need to take the initiative to find unofficial seminars.
  - You may count up to **three** (3) unofficial seminars.
Privacy and Technology Seminars

- This semester, the department will be offering a special new series of seminars:
  - Called *Privacy and Technology Seminar Series*.
  - Generally meets Wednesday 5:00 PM in G-39 ESB.
  - Topics deal with the shaping of policy and implications of technological advancement on the privacy and civil liberties of citizens.
  - Cross listed as CPE-494A and CPE-694.
- The talks will generally count as *Official Seminars*, under the following conditions:
  - If you are registered for CPE-494A or CPE-694, then you may not count them for graduate seminar credit.
  - There must be an *assessment* in eCampus for you to get credit as an official seminar.
    - Otherwise, you can still get credit as an unofficial seminar.
### Upcoming Official Seminars

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Speaker</th>
<th>Time</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>Jan. 14</td>
<td>Privacy and Technology</td>
<td>Soliman &amp; Espina</td>
<td>5 PM</td>
<td>G39</td>
</tr>
<tr>
<td>Jan. 21</td>
<td>Research with Human Subjects</td>
<td>Philip Rubin</td>
<td>5 PM</td>
<td>G39</td>
</tr>
<tr>
<td>Jan. 28</td>
<td>Privacy Law</td>
<td>Lisa Nelson</td>
<td>5 PM</td>
<td>G39</td>
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<tr>
<td>Feb. 4</td>
<td>Media Coverage of Privacy</td>
<td>Paige Lavender</td>
<td>5 PM</td>
<td>G39</td>
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<tr>
<td>Feb. 11</td>
<td>The Internet of Things</td>
<td>Chris Greer</td>
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<tr>
<td>Feb. 16</td>
<td>WVU Libraries</td>
<td>Mary Strife</td>
<td>4 PM</td>
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<td>Feb. 25</td>
<td>Cybersecurity</td>
<td>Ari Schwartz</td>
<td>5 PM</td>
<td>G39</td>
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<tr>
<td>Mar. 4</td>
<td>The Federal Privacy Act</td>
<td>Dorothy Glancy</td>
<td>5 PM</td>
<td>G39</td>
</tr>
<tr>
<td>Mar. 11</td>
<td>Sensors*</td>
<td>Patrick Tucker</td>
<td>5 PM</td>
<td>G39</td>
</tr>
<tr>
<td>Mar. 18</td>
<td>Telecommunications*</td>
<td>Allan Manuel</td>
<td>5 PM</td>
<td>G39</td>
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<tr>
<td>Apr. 1</td>
<td>Data Aggregation</td>
<td>Jason Thomas</td>
<td>5 PM</td>
<td>G39</td>
</tr>
<tr>
<td>Apr. 15</td>
<td>Government</td>
<td>Aneesh Chopra</td>
<td>5 PM</td>
<td>G39</td>
</tr>
<tr>
<td>Apr. 22</td>
<td>Data Analytics</td>
<td>John Grant</td>
<td>5 PM</td>
<td>G39</td>
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</table>

- Dates and speakers are subject to change (especially *).
- Check eCampus to confirm the speakers and topics.
Example Unofficial Seminars

- The following *may* count as unofficial seminars:
  - Technical talks sponsored by other departments.
    - Math, physics, mechanical engineering, etc.
  - College of Engineering seminars.
  - WVU Festival of Ideas seminars.
  - Graduate Education & Life seminars.
  - ETD seminar.
  - Conference presentations.

- The following *may not* count:
  - Attending a class you are taking.
  - Recruiting session by a company.
  - A company marketing or demonstrating a product.
  - Meetings of student organizations (IEEE, ACM, etc.) *unless* there is a guest technical speaker.
  - Webinars *unless* you have received prior approval.

M.C. Valenti (Lane Department of Computer Science and Electrical Engineering, West Virginia University, U.S.A.)

LCSEE Graduate Seminar

Jan. 12, 2015
Etiquette

- Please be respectful of our guest speakers.
  - Arrive on time and stay to the conclusion.
  - Pay attention: Don’t sleep, read, Internet surf, or do-homework.
  - Don’t talk, except to ask the speaker a question.
  - Try to think of at least one question to ask the speaker.

- If you arrive late or leave early, then you have not attended the entire seminar and cannot receive credit for attending.
You must use eCampus to get credit for attending.

Inside eCampus you may:
- Enter assessments for individual seminars, which will demonstrate you attended them.
- See which seminars you have received credit for attending.
- See a listing and calendar of upcoming seminars.

To login:
- Point your browser to http://ecampus.wvu.edu
- Login with your MyID username/password.
How to Get Credit for Attending

- Either click *Assessments* or *My Calendar* to find the seminar you attended.
- Click *Begin* and answer the questions:
  - Question 1: Write a short summary of the seminar.
    - Summary should have just enough detail to prove that you attended.
    - 5-10 sentences (please don’t use an outline).
    - Don’t re-enter the abstract or use someone else’s summary.
  - Question 2: Click *true* to certify that you attended.
    - Click *Save and Submit* to save and submit your answers.
- You may resubmit if you made a mistake or want to edit your summary.
- I must manually grade your submission, so it may take several days before your credit appears in the *My Grades* area.
The seminar began with a brief discussion of the speaker’s career. He then gave a description of the lab in which he works at the university. He discussed the Smart Gate systems currently being implemented at border crossings around the world, and mentioned a visitor he had from Melbourne, Australia. A video was shown concerning the topic of people who are considered “faceblind”, which means they are unable to discern peoples faces (even famous people or family members). The speaker also discussed the use of non-visible light spectra for face recognition.
eCampus Demo
Official seminars must be entered within one week of the seminar.
- After one week, the assessment will disappear.
- If you forget to enter an official seminar by the one-week deadline, you may still enter it as an *unofficial* seminar.
- However, if you enter an official seminar as an unofficial seminar, then it will only count as an unofficial seminar.

Unofficial seminars must be entered into eCampus by the last day of classes.
Honor Code

- Make sure you write your own seminar summaries.
- Copying another summary (including copying the abstract) is considered an honor code violation.
- Don’t claim to attend if you were not there for the entire seminar.
- Do not claim double credit. For instance, if you receive credit for attending an official seminar, then don’t also enter it as an unofficial seminar.
Outline

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   - Course policies.
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3 Conclusions
Graduate Seminar

- You must take graduate seminar in your first semester.
- Two semesters of grad seminar are required for:
  - Research-track MS students (i.e. thesis option).
  - Ph.D. students (but can count seminar applied towards your M.S.).
- One semester of grad seminar is required for:
  - Professional-track MS students (i.e. problem report or coursework).
Common MS Requirements

- Seminar.
- Research:
  - 6 hours for thesis.
  - 3 hours for problem report.
  - Register for CS 697 or EE 697 (797 is for Ph.D. students only!).
  - Make sure you have a research advisor before registering.
- Course limitations:
  - No more than three 400-level courses.
  - No more than one independent study (CS/EE 695).
  - Course selection is subject to approval by the student’s Advisory Examination Committee (AEC).
- Final defense:
  - For thesis or problem report, defend your research.
  - For coursework option, must pass an oral coursework defense.
Plan of Study

- The Plan of Study is found online:
  - Go to lcsee.wvu.edu
  - Click Graduate on the left side, then click Masters Program.
- Must be submitted by the middle of your second semester.
- Information needed on the form:
  - Your major (EE or CS) and degree option.
  - The courses you plan to take and count towards your degree.
  - Your AEC committee members (three of them).
  - A tentative research title.
- There is also a Supplemental Plan of Study that you need to turn in at the same time.
- Research assistants must indicate the thesis option.
Areas of Concentration

1. Electronics and Photonics
2. Systems and Signals
3. Computer Systems
4. Software and Knowledge Engineering
5. Theory of Computing
Majoring and Minoring

- Each area has:
  - A few (2-4) core courses offered every year.
  - Several elective courses.

- The courses for each area are posted to the department’s webpage.

- To **Major** in an area, you must:
  - Take at least three (3) courses from the area
  - Must include at least one core course.

- To **Minor** in an area, you must:
  - Take one of the core courses.

- To indicate your major and minor areas, you must fill out and turn in a *Supplemental Plan of Study*.
  - Turn it in with your Plan of Study.
  - Also found on departmental webpage.
MSEE Program

1. Electronics and Photonics
   - EE 550
   - EE 551

2. Systems and Signals
   - EE 513
   - EE 515

3. Computer Systems
   - CS 550
   - CPE 670

4. Software/Knowledge Engineering
   - CPE 685, CS 591o, CS 591Q, CS 591

5. Theory of Computing
   - CS 510
   - CS 510
   - CS 525

Major in one area from \{1-4\}
Minor in one other area \{1-5\}

Prob. Report = 1 more major course
Coursework option = 2 more from major
MSCS Program

- Major in one of areas \{3,4,5\}.
- Minor in other two areas \{3,4,5\}.
- Non-thesis students take two more from \{3,4,5\}.

3. Computer Systems
   - CS 550
   - CPE 670

4. Software/Knowledge Engineering
   - CPE 685, CS 591o, CS 591Q, CS 591

5. Theory of Computing
   - CS 510
   - CS 510
   - CS 525
Ph.D. Program

The department has three Ph.D. programs:

- Electrical Engineering
- Computer Engineering
- Computer and Information Sciences

Degree requirements:

- Coursework:
  - At least six courses (18 credit hours) beyond the MS requirements.
  - All courses must be at the 500 level or higher.
  - Two courses (6 credit hours) must be at the 600 and 700 level.

- Seminar (if you didn’t do a M.S. Thesis in the Lane Dept.).
- Research.
  - CS, CPE, or EE 797.

- Examination:
  - Qualifying exam.
  - Dissertation proposal and candidacy exam.
  - Dissertation and final defense.
Ph.D. Qualifier

The Ph.D. qualifier involves two main components:

- **Coursework:**
  - Take three *qualifier* core courses from two areas.
  - Must receive grade of B or better in each course.
  - Permissible areas depend on the degree:
    - EE = \{1, 2, 3\}.
    - CPE = \{2, 3, 4\}.
    - CS = \{3, 4, 5\}.

- **Research:**
  - Designed to demonstrate your research ability.
  - Includes a \sim 20\ page written report.
Ph.D. Qualifier

Mechanics of the qualifier:

- Student must first attempt the qualifier:
  - Within 14 months if you received your MS from the Lane Dept.
  - Within 26 months otherwise.
- Must fill out a Request for Ph.D. Qualifying Examination form.
- The department will appoint 3 or 4 faculty members to your Qualifying Examination Committee.
- The exam is oral and consists of the following parts:
  - Presentation by the student of his/her research project
  - Questions about the work, its context, and relevant literature
  - Questions about course work, focusing specifically on the three core courses for which the student has earned credit
- Outcome may be Pass, Fail, or Pass with Recommended Coursework.
- If a student fails, they get one more chance within six months.
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3. Conclusions
Grad seminar is designed to give you exposure to the research areas in the department.

Think of grad seminar as your opportunity to learn about possible paths your research may take.

Questions about graduate programs:
  - First check the departmental website.
  - If about an area, check with the area coordinators:
    - Korakakis (1), Valenti (2), Noore (3), Goseva (4), Eschen (5).
  - If about your degree program, check with the program coordinator:
    - Choudhry (EE/CPE), Adjeroh (CS).
  - Questions about paperwork (plan of study, etc) may be directed to the graduate secretaries:
    - Ann Lemine-Turner (LCSEE) and Sarah Offutt (CEMR).
Questions?