University of Texas at El Paso
Electrical and Computer Engineering
Junior Professional Orientation
Spring 2024 – ECE3100 (Update 01/19/2024)

INSTRUCTOR: Virgilio Gonzalez
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EMAIL: vgonzalez3@utep.edu
Lecture HOURS: F 9:30AM – 10:20 AM, CRBL305.
OFFICE HOURS: T 2:00 – 3:00 PM, W 4:00 PM – 5:00 PM.

TEXT: (Also recommended references)
• There is no Textbook for this class

Catalog Description
This course provides an introduction to the profession of electrical engineering with emphasis on career placement, public service, graduate study, engineering ethics and professional registration.

Prerequisites/Co-requisites
Junior Standing for BSEE Majors.

Software
Web Access to Blackboard.

Course Outcomes
1. Become informed about the Career Services Office and the process associated with obtaining placement both as an intern and/or a career professional.
2. Be able to prepare a resume suitable for use to secure future professional employment and be aware of techniques for interviews.
3. Define possible career paths, and plan future courses toward the preferred option.
4. Gained knowledge related to graduate studies and continuing education.
5. Gained an appreciation of common issues in engineering ethics
6. Become aware of the process involved in becoming registered as a Professional Engineer.
7. Be aware of other professional topics relevant to engineers and of available options in the ECE program.

Tentative Calendar
Topics might change depending on external speaker availability

<table>
<thead>
<tr>
<th>Session #</th>
<th>Week</th>
<th>Speaker</th>
<th>Topic</th>
<th>Assignments Due</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>01/19/24</td>
<td>Dr. Virgilio Gonzalez</td>
<td>Planning for graduation and beyond.</td>
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<tr>
<td></td>
<td>Date</td>
<td>Activity/Assignments</td>
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<tr>
<td>2</td>
<td>01/26/24</td>
<td>Career Center: Resume / How to Navigate a Career Fair</td>
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<td>3</td>
<td>02/02/24</td>
<td>External Activity (No class meeting, attend Virtual Career Fair)</td>
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<tr>
<td>4</td>
<td>02/09/24</td>
<td>ARMY DEVCOM – DAC: Mandatory Career Fair, Attend event out of class, Mandatory</td>
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<tr>
<td>5</td>
<td>02/16/24</td>
<td>Dr. Raymond Rumpf: Personal Branding</td>
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<td>6</td>
<td>02/23/24</td>
<td>Industry partner: Industry perspective.</td>
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<td>7</td>
<td>03/01/24</td>
<td>Dr. Miguel Velez-Reyes: Graduate Programs</td>
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<td>8</td>
<td>03/08/24</td>
<td>Dr. Virgilio Gonzalez*: Engineering Design process*</td>
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<td>9</td>
<td>03/15/24</td>
<td>Spring Break: Future Education Survey</td>
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<td>10</td>
<td>03/22/24</td>
<td>Dr. Virgilio Gonzalez*: Project Management*</td>
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<tr>
<td>11</td>
<td>03/29/24</td>
<td>CESAR CHAVEZ DAY</td>
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<tr>
<td>12</td>
<td>04/05/24</td>
<td>Dr. Virgilio Gonzalez*: Degree Planning*</td>
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<td>13</td>
<td>04/12/24</td>
<td>TBD</td>
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<tr>
<td>14</td>
<td>04/19/24</td>
<td>Webinar on Ethics, online, <a href="https://pels.texas.gov/webinars.html">https://pels.texas.gov/webinars.html</a></td>
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<td>15</td>
<td>04/26/24</td>
<td>Professional Future and education reports</td>
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<tr>
<td>16</td>
<td>05/03/24</td>
<td>Dr. Virgilio Gonzalez*: Dr Gonzalez modules are subject to change due to external speakers availability</td>
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</table>

**General Policies**

- Each session is a seminar presentation in the regular classroom. There will be several external speakers. There are also several activities you will need to conduct on your own, such as webinars.
- The course will be delivered in **hybrid mode** by simultaneously streaming the live sessions.
- You are expected to dedicate enough time each week to review the assigned materials, answer quizzes, submit postings and assignments.
• Students are encouraged to use MS teams to interact in the allocated office hours to talk with the instructor. Face to face time is also available in the professor office. Please make an appointment reservation to guarantee availability.

• Technology Requirements
  o Support course content is delivered via the Internet through the Blackboard learning management system (LMS). Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome seems to be the best-supported browser for Blackboard; other browsers may cause complications with the LMS. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.
  o You might need to have access to a computer/laptop, scanner, a webcam, and microphone. You will need to download or update the following software to review some of the online content: Microsoft Office, PDF reader tool (Adobe or others), Updated Web Browser (Google Chrome is recommended). Check that your computer hardware and software are up-to-date and able to access all parts of the course.
  o If you encounter technical difficulties beyond your scope of troubleshooting, please contact the Help Desk as they are trained specifically in assisting with technological needs of students.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Points / Total</th>
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<tbody>
<tr>
<td>Draft CV, Annotated CV and Revised CV</td>
<td>33.3 ea / 100 total</td>
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<tr>
<td>Career Fair Attendance (Virtual Event)</td>
<td>100 total</td>
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<tr>
<td>Updated Degree Plan, Gantt Chart, Critical Path</td>
<td>100 total</td>
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<tr>
<td>Ethics Webinar (TBPELS)</td>
<td>100 total</td>
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<tr>
<td>Ethics Assignment</td>
<td>100 total</td>
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<tr>
<td>Professional Engineer Licensure procedures</td>
<td>100 total</td>
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<tr>
<td>Future Education survey</td>
<td>100 total</td>
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<tr>
<td>Future Career Plans</td>
<td>100 total</td>
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<tr>
<td>Participation / attendance tasks</td>
<td>200 total</td>
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<td>NOTE Assignments could be replaced by a different topic with the instructor’s approval</td>
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<tr>
<td>TOTAL</td>
<td>1000</td>
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Assignments and Attendance to Out of Class Events:
• Each element will accumulate points
• Class Attendance: Normally, a significant part of your grade is to attend and participate in all seminars given as part of the course during class time. Therefore, “Attendance” will be graded by active weekly participation in assigned online discussion boards, and will be worth 20% of your grade. If you have conflicts during the assigned period, please contact the instructor to find alternative arrangements.
• Prepare a draft resume and submit it to the instructor electronically by the assigned date. Then contact the career center and get a revised version. Submit the revised version before the Career Expo/Fair, highlighting the changes (10%). You should upload the scanned
draft, then the annotated version from the career center, and the final clean version. There are upload sections for the different revisions.

- You are required to attend the Career Fair/Expo on either, the virtual or face-to-face version (https://www.utep.edu/student-affairs/careers/events/career-fair-calendar.html). You will need to ensure that you are registered and indicate that you are a student in ECE 3100 JPO. Career Services will send an attendance list and that is the only acceptable evidence of your participation (10% of your grade). If you cannot participate, contact Dr. Gonzalez for a makeup assignment. Prior approval required to not attend.

- You are required to participate in one of the webinars on Professional Engineering Ethics sponsored by the Texas Board of Professional Engineers and Land Surveyors, https://pels.texas.gov/webinars.html. Notice that posted times are central time. El Paso is an hour earlier (mountain time). Notice that registration opens 30 days before the webinar. Spaces are limited (10% of your grade). Lack of registration due to capacity is not an excuse. You will need to turn in a copy of your registration and a 1-page summary of the webinars as evidence of your participation. If you cannot participate, contact Dr. Gonzalez for a makeup assignment. Prior approval is required to not attend. (Due: Check Calendar)

- Ethics Cases of Study assignment online. (Due: Check Calendar) (10%)

- Optional: GRADUATE AND PROFESSIONAL SCHOOLS FAIR, or INTERNSHIP & PART-TIME JOB FAIR
  o Graduate, law, and medical professions programs from throughout the nation attend this event to recruit students to their academic and research programs. Students interested in pursuing advanced degrees are invited to attend.

- Review the National Society of Professional Engineers site description about engineering licensing (https://www.nspe.org/resources/licensure/what-pe) and why it is important. Also the online videos and instructions to become a Professional Engineer in TBPELS site links “Why get licensed” and “How to get licensed” (https://www.nspe.org/resources/licensure/what-pe) (https://pels.texas.gov/lic.htm, https://pels.texas.gov/lic_basic.htm). A report will be due electronically (Due: Check Calendar) (10%).

- Degree evaluation using critical path and Gantt charts (Due: Check Calendar) (10%)

- Future professional plans and Future for continuing education survey (Due: Check Calendar) (10% each).

- Additional assignments to be announced.

- Optional alternative assignments (To make up for a missed required event):
  o IEEE external speakers invited by local section. Dates TBA.
  o Acceptance to an Undergraduate research program, Internships. Service Learning or other approved experiences (talk with instructor).

- Letter scale will be: A: 90%-100%; B: 80%-89.9%; C: 70%-79.9%; D: 60%-69.9%; F: below 60% of the reference grade.

- Each report must have a typed cover page, including EE3195, assignment name, student name, id, date. Remaining pages must include your name.
• Reports will be turned in to the professor before each deadline through the assignment area in Blackboard.
• Some large attachments might require saving the document in a shared OneDrive folder and share the link with the instructor.
• Additional requirements may be stated in specific assignments.

GENERAL COURSE POLICIES
• For email questions or concerns, please start the email subject line with “ECE3100: … “.
• Samples of student work will be collected for accreditation purposes. Please notify the professor, in writing, if there is any confidentiality restriction.
• **No late work** will be accepted and special accommodations require the letters with instructions from CASS.
• The Professor will be available only during the assigned office hours or by appointment.
• **Each report must have a typed cover page**, including ECE3100, assignment name, student name, id, date. Remaining pages must include your name.
• Online work must have in the first text line the name of the student, id number, and assignment name.
• Detailed instructions for the assignments will be **provided later** in separate handouts through Blackboard

**Academic Honesty**
• Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) for possible disciplinary action. To learn more, please visit HOOP: Student Conduct and Discipline.
• Information about University wide policies could be found in the Dean of Students Web page at [http://studentaffairs.utep.edu/Default.aspx?alias=studentaffairs.utep.edu/dos](http://studentaffairs.utep.edu/Default.aspx?alias=studentaffairs.utep.edu/dos)

**AI allowed with proper acknowledgement**
Use of AI technologies or automated tools, particularly generative AI such as ChatGPT or DALL-E, is **only allowed with proper attribution given for its use.**

Students must properly cite and give full credit to the program used upon submission of every relevant assignment. For example, text generated using ChatGPT must be cited:

Chat-GPT(version). Date of query (year/month/day). “Text of your query.”
Generated using OpenAI. [https://chat.openai.com/](https://chat.openai.com/)

A short paragraph describing how the tool(s) was/were used for the assignment must be included.
Accommodations and NETiquette

- NETiquette
  - Always consider audience. Remember that members of the class and the instructor will be reading any postings.
  - Respect and courtesy must be provided to classmates and to instructor at all times. No harassment or inappropriate postings will be tolerated.
  - When reacting to someone else’s message, address the ideas, not the person. Post only what anyone would comfortably state in a F2F situation.
  - Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space. If students wish to do so, they have the ethical obligation to first request the permission of the writer(s).

- The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the UTEP Center for Accommodations and Support Services.

STUDENT RESOURCES

UTEP provides a variety of student services and support:

- **UTEP Library**: Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- **Help Desk**: Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.
- **University Writing Center (UWC)**: Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- **Math Tutoring Center (MaRCS)**: Ask a tutor for help and explore other available math resources.
- **History Tutoring Center (HTC)**: Receive assistance with writing history papers, get help from a tutor and explore other history resources.
- **Military Student Success Center**: UTEP welcomes military-affiliated students to its degree programs, and the Military Student Success Center and its dedicated staff (many of whom are veterans and students themselves) are here to help personnel in any branch of service to reach their educational goals.
- **RefWorks**: A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.