

Nuclear and Radiological Engineering Design
ENU 4192, Section 13282 and 31000, Spring 2021
W 1500-1800, UF “Periods” 8-10
4192-Synch: 100% Online (Synchronous)
4192-Synch-99: 80-99% Online (Synchronous)
Final Exam: None

Instructor

DuWayne Schubring, Associate Engineer
315 Materials Engineering Building (MAE). (All office hours will be via e-mail/Zoom.)
352-294-7870
dlschubring@ufl.edu (Note: The Canvas “conversations” feature *is not* e-mail. Messages sent via that system will not be acknowledged.)

Office Hours

Report Weeks: TBD
Other Weeks: TBD

Beginning and end times of office hours will be enforced strictly. If you cannot meet during office hours, appointments are available, though appointments on weekends and days in which no office hours are held are reserved for genuinely exceptional circumstances.

Course Description

Continuation of ENU 4191. Nuclear reactor theory and engineering as applied to design synthesis of reactors. Nuclear, material, thermo-fluid and/or mechanical design considerations of nuclear reactors with particular emphasis on design characteristics. Analytical methods and application of computer codes for design analysis and evaluation. Individual and/or group design involving integration of reactor neutronics, dynamics and control, thermal hydraulics, transient analysis and safety, power production, instrumentation, control, radiation shielding and protection, fuel cycle, fuel behavior and/or cost.

Prerequisites

ENU 4134, ENU 4191 with a minimum grade of C, ENU 4612, and ENU 4630. Co-requisite: ENU 4641.

Course Objectives

This Senior Capstone course will train students in a large team-based reactor design project, including all technical areas within the NE undergraduate program. Written and oral communication will be emphasized through 4 reports and 3-4 presentations, along with weekly progress updates through informal discussions.

By this point in your college career, it is assumed that you have developed communication and team skills, assimilated a large volume of technical information, and begun to develop engineering judgment. As a capstone course, ENU 4192 will test the degree to which you have achieved these goals. It is a *sink or swim* experience – if you complete this course, you’ll likely get your degree and be allowed to do engineering out in the real world. Passing grades will not be granted to those unable to do so safely and effectively.

This course is meant as a transition to employment from the typical ENU course. Throughout your college experience (and before), instructors expended considerable effort to organize the material for your rapid consumption, but in ENU 4192 *you will not be led step-by-step* through the design project. It is *your job* to formulate design questions, *your job* to break them into manageable chunks, *your job* to acquire and use the tools needed to do the analysis, and *your job* to communicate the results and/or ask for assistance when necessary.

ABET Professional Component

3 credits Engineering Topics

Student Outcomes Supported by Course

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics (low coverage)
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors (high coverage)
3. an ability to communicate effectively with a range of audiences (high coverage)
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts (medium coverage)
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives (medium coverage)
6. n/a
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies (medium coverage)

Textbook

None

Reference Materials

Useful references for ENU 419x include, but are not limited to:

1. FE Reference Handbook from NCEES:

- <http://ncees.org/exams/study-materials/download-fe-supplied-reference-handbook/>
2. Handbook of Nuclear Reactors Calculations, Vol. I, Ed. Y. Ronen, CRC Press, 1986.
 3. A Guide to Nuclear Power Technology, F.J. Rahn, et al., J. Wiley & Sons, 1984.
 4. Structural Materials in Nuclear Power Systems, J.T.A. Roberts, Plenum Press, 1981.
 5. Principles of Design Improvement for Light Water Reactors, L.S. Tong, Hemisphere Publishing, 1988.
 6. Thermal Design of Nuclear Reactors, R.H.S. Winterton, Pergamon Press, 1981.
 7. Nuclear Power Plant Design Analysis, Alexander Sesonske, NTIS TID 26241, 1973.
 8. Nuclear Reactor Analysis, J.J. Duderstadt & L.J. Hamilton, J. Wiley & Sons, 1976.
 9. Nuclear Systems I & II, N.E. Todreas & M.S. Kazimi, HPC, 1990.
 10. Heat Transfer and Fluid Flow in Nuclear Systems, Henri Fenech, Pergamon Press Inc, 1981, ISBN 0-08-027 181-2.
 11. Nuclear Power Plant Engineering, James H. Rust, Haralson Publishing Company, 1979, ISBN 0-934534-00-4.
 12. Nuclear Heat Transport, M.M. El-Wakil, Intl Textbook Co (and ANS), 1971, ISBN 0-7002-2309-6.
 13. Nuclear Power Plant's FSARs
 14. Nuclear Fuel Cycle: Analysis and Management, Robert Cochran and N. Tsoulfanadis, 1993.
 15. Nuclear Power Reactor Instrumentation Systems Handbook, Vol. I & II, J. M. Harrer and G.Beckerely, USAEC, 1973.
 16. PE Review Manual
 17. Nuclear Reactor Kinetics, 2nd Edition, M.S. Ash, 1979.
 18. Radiation Detection and Measurement, 2nd Edition, G. F. Knoll, 1979.
 19. Radiation Shielding, J. K. Shultis and R. E. Faw, 2000.
 20. Nuclear Reactor Theory, Bell and Glasstone, VanNostrand Reinhold Company, New York, 1970.

+ any other textbooks you've accumulated along the way.

Course Schedule

Details of each week's timing are subject to change until 1500 on the preceding Tuesday. In particular, all-class sessions may be scheduled between the informal discussions if needed. Do not make conflicting plans with any time in the 1500-1800 block on Wednesdays.

- January 13
Syllabus, HPC Resources (if available), Group A Informal Discussion (ungraded), and Group B Informal Discussion (ungraded) – order TBD
- January 20
Group A Informal Discussion (1500-1615)
Group B Informal Discussion (1620-1735)
- January 27
Group A Informal Discussion (1500-1615)
Group B Informal Discussion (1620-1735)
- February 3

- Group A Presentation (1500-1615)
- Group B Presentation (1620-1735)
- February 10
 - Group A Informal Discussion (1500-1615)
 - Group B Informal Discussion (1620-1735)
- February 17
 - Group A Informal Discussion (1500-1615)
 - Group B Informal Discussion (1620-1735)
- February 24
 - Group A Informal Discussion (1500-1615)
 - Group B Informal Discussion (1620-1735)
- March 3
 - Group A Presentation (1500-1625)
 - Group B Presentation (1635-1800)
- March 10
 - Group A Informal Discussion (1500-1615)
 - Group B Informal Discussion (1620-1735)
- March 17
 - Group A Informal Discussion (1500-1615)
 - Group B Informal Discussion (1620-1735)
- March 24
 - Group A Informal Discussion (1500-1615)
 - Group B Informal Discussion (1620-1735)

Pending final policy clarification on UF “recharge days”, this session *may* be permitted as a free excused absence for all those who do not wish to attend. Details to follow via e-mail.
- March 31
 - Group A Presentation (1500-1615)
 - Group B Presentation (1620-1735)

In the event that Report 2 presentations are particularly strong, this presentation may be dropped at the discretion of the instructor in favor of other professionally-relevant activities.
- April 7
 - Group A Informal Discussion (1500-1615)
 - Group B Informal Discussion (1620-1735)
- April 14
 - Group A Informal Discussion (1500-1615)
 - Group B Informal Discussion (1620-1735)
- April 21
 - Group A Presentation (1500-1625)
 - Group B Presentation (1635-1800)

All Things COVID

Technology Requirements and Zoom Decorum

All class sessions will occur online, synchronously, via Zoom meetings. You are required to use a computer or other device with a microphone and the ability to use the Share Screen feature on Zoom. Students in 4192-Synch99 must meet these requirements with a mobile device, such as a phone or tablet, or laptop. You should mute yourself unless actively speaking/conversing. Since there will be no recordings made and presentations are an integral component of the course, you *do not* have the right to communicate only via the text chat in this course. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

You are not required to turn on your video. If you are (1) using a busy internet connection, (2) are further than 300-350 miles from Gainesville (that is, beyond Miami or Atlanta or Pensacola), (3) multitasking in a way that may distract, or (4) likely to be interrupted, please leave it off. If you choose to use a profile image, please ensure that it is in good taste.

Required COVID Statement for 4192-Synch99

*The following statement applies only to this section. Our only face-to-face session will be the Informal Discussion on February 24, unless all participants in this section, the corresponding group leaders, and the instructor agree on another informal discussion date. Contrary to the following required statement, a classroom **has not** been assigned. If this section runs, I presume some appropriate space will be found.*

We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms:

<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

please use the UF Health screening system and follow the instructions on whether you are able to attend class.

<https://coronavirus.ufhealth.org/screen-test-protect/covid-19-exposure-and-symptoms-who-do-i-call-if/>

Evaluation of Grades

Grading Items

- 400 – Informal discussions
- 150 – Report 1
- 300 – Report 2
- 150 – Report 3
- 500 – Report 4

Each score will be independently rounded to a whole number of points. Report scores include the corresponding presentation (excluding the case in which Presentation 3 is cancelled).

Grading Scale

Any student earning 324 or fewer points on Report 4 will automatically fail the course, regardless of grades on other items. Otherwise, final grades will be assigned based on percentages as follows:

- A: 87%+
- A-: 85-86.99%
- B+: 83-84.99%
- B: 75-82.99%
- C: 67-74.99%
- E: < 67%

I reserve the right to grant higher grades at the end of the course at my sole discretion and to round assignment grades to full points. Under no circumstances will grades of C- or any flavor of D be used (they are insufficient for the major, besides).

Grading Notes

There are 11 informal discussions scheduled. The first is ungraded. Each of the 10 others is graded out of 40 points. In the event that one or more graded informal discussions are cancelled or you are excused from one or more graded informal discussions, the only available accommodation is to exclude the score(s). If all 10 are held and you miss none, each is worth approximately 2.67% of the course grade. If, for example, one is cancelled due to my (unexpected) travel and you miss another one due to illness or a religious holiday, each of the remaining 8 are worth approximately 3.33% of the course grade. (Therefore, if you are required to attend all 10 informal discussions, report points and informal discussion points have equal value. If you attend fewer than 10 informal discussions, an informal discussion point is more valuable than a report point.)

I will evaluate your performance at informal discussions. These are individual grades, though they will likely be correlated to those of your group members. The grades will be assigned based on your preparation for the meeting (being ready to discuss progress, having visuals if needed), with an emphasis on completion of “action items” from the previous meeting. You are not required to prepare a written report or slide deck for these informal discussions.

The informal discussion grades are not intended to evaluate the *quality* of your design work as much as your consistent *process*. Therefore, informal discussion grades tend to not strongly correlate

with report grades. Since 87% will earn a grade of A in this course, a score of 35/40 represents an effective “checking off boxes” effort and scores of 36 or higher are reserved for demonstration of unusual initiative.

At the end of the semester, your lowest score (if lower than 20) on an informal discussion will be replaced by a score of 20/40. This “Mercy Rule” is in place to avoid an excessive deleterious effect on your grade from a single poor performance or unexcused absence. (Given that a score of 35 is to be considered a good score, this score of 20 effectively “caps” the reduction at 15 points or 1% of the course total.) In past years, this rule has primarily benefitted students who miss a class session for personal reasons not within those allowed by UF rules – see the attendance policy below.

Noting again that 87% is necessary and sufficient to earn an A, a score of 90% on a report line-item is a praise-worthy achievement that can be interpreted as “fully meets expectations”. A score of 95% represents genuine excellence. A 100% can be interpreted as “the instructor can hardly imagine a student doing a better job” – on average, there are fewer than half a dozen perfect scores earned among all informal discussions for all students and all line-item grades in all reports.

Per UF policy, grades are entered into Canvas to enable you to look up grades quickly. These grades are manually copied from other documents. I reserve the right to correct data-entry errors, as well as other errors, until finalization of grades with the registrar. Further, Canvas approximates the 4:11 weighting between Discussions/Reports as 26.67%:73.33%, which may mean your grade is displayed slightly (~0.01%) higher or lower than it really is. Such rounding errors will be checked at the end of the course.

More information on UF grading policy may be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Grade Appeal

All appeals of grades, including those from clerical/grade-calculation errors, must be made within 1 week of return. (This may be modified for specific assignments near the end of the term. I will announce this via e-mail as needed.) Appeals will be considered for clerical errors and addition errors. Appeals will also be considered with regard to inconsistent scoring. It is inevitable that scoring in those course is somewhat subjective; a margin of error of one point per line item is allocated for this. That is: if you receive a grade of 27/30 on a line item, only those appeals that propose a grade of 29/30 or better will be considered. Grade appeals will not be entertained if you simply do not like the distribution of points among line-items in the project.

Grade appeals must be provided in the following format:

- Provide, in PDF format only, a written summary of which line-item(s) you believe were graded inaccurately. Be as specific as possible. In particular, be clear about page numbers – PDF vs. bottom-of-page page numbers.
- Send your appeal in the form of an e-mail with “ENU 4192” and “Grade Appeal” in the subject line.

You will be informed of the result of your appeal via e-mail reply.

If I believe you are not acting in a good faith belief that more points are deserved, I will deem the appeal frivolous. Requests to change a line-item by only one point will also be considered frivolous. Following two frivolous appeals, your grade appeal privilege through this method will

be *revoked*. Further appeals must be done through the petitions process, which requires formal paperwork and department/program level involvement.

Attendance and Late Work

Attendance is required at informal discussions and will be taken, starting January 20. Requests to miss presentations will only be granted if mandated by UF policy or in other genuinely exceptional circumstances. I reserve the right to require a make-up presentation in a form I choose or to base your grade on the written report (or the written report and slides) only, at my discretion.

Absences and late-work excuses can be grouped into the categories of *professional*, *medical*, and *personal*.

Professional: Reasonable extensions for job/internship interviews, technical conferences, or other professional/career development reasons should be requested. Most requests are granted, excluding those that provide a student or group of students an unfair advantage, cause significant disruption to the course or grading schedule, or violate some UF policy.

Medical: Extensions will also be granted for (your own) medical reasons – please do not come to class if you are ill. Per UF policy, in the case of medical issues that are frequent or suspiciously-timed (*e.g.*; you are repeatedly, suddenly ill at deadlines), I may request a signed note from a physician or similar professional practitioner.

Personal: In addition, UF policies require accommodation for several non-academic, non-medical reasons. Extensions for these personal issues are generally limited to those mandated by the letter of UF policies. The list of UF-approved personal reasons changes from time to time. If you have a question regarding your personal issue and if it qualifies under one of the excused absence/late-work policies, contact me in advance.

I reserve the right to grant extensions for other personal reasons as *rare exceptions to the rule* at my sole discretion – advance notice gives you the best chance at a favorable decision. The approval of an extension does not establish precedent for that student (notably, there are some scenarios that I may accommodate only once) or for other students with similar circumstances.

All requests for excused absence or extension must be submitted in writing, preferably via e-mail.

The 12-day rule will be enforced strictly. Note that the count of days is based on a per-student, not per-approved-activity basis.

For the purposes of this course, in the above-referenced list of approved absence (extension) reasons, the word “family” shall be taken to mean your parents, grandparents, great-grandparents (etc.); children, grandchildren (etc.); siblings; aunts/uncles; nieces/nephews; your spouse and the spouse of any of the above; and half- or step- “versions” of the above categories. More distant relatives (a cousin, your spouse’s sibling’s spouse, etc.), partners (excluding spouses), and pets are not included. Minor illnesses (guideline: anything meriting home care only or care at a walk-in clinic, as opposed to an ER) of family members, including minor children, do not count as serious family emergencies, nor do events such as birthdays, anniversaries, weddings, etc.

Political activities, including protests, demonstrations, and the like are considered personal matters and not generally permitted as reasons for extensions. This includes activities related to nuclear engineering or nuclear power. Exceptions: (1) A student who is pursuing nuclear-related (whether pro- or anti-) politics as a career path may be granted extensions, at my discretion, on condition of providing evidence of *bona fide* efforts to secure a full-time position or to secure

admission to a relevant, non-STEM degree-granting graduate program and (2) activities that are connected to the 2021 ANS Student Conference *that do not conflict with a presentation* will be taken as related to that professional activity and potentially grounds for extensions.

Further, be advised that any approved reasons for extensions do not reduce the amount of work you are expected to complete, but merely rearranges the timing. For those issues that are predictable (interview, holidays, etc.), you should work ahead to avoid disruption. To mitigate the issues with unexpected absences (illness, etc.), *keep your associate engineers up to date with your activities in your lead technical areas.*

Pursuant to HWCoe policy, the following statement is required: Excused absences are consistent with university policies in the undergraduate catalog

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

and require appropriate documentation.

Changes to Syllabus

Changes to this syllabus will be provided via the Canvas platform. Such changes may include those required by policy changes, my travel, changes in the speed of course coverage, university closure, errors in previous syllabus versions, and other reasons.

Other Course-Specific Policies

Obtaining Assistance from Other Faculty

A list of other faculty, their areas of expertise, and office hours will be made available on the course website. Please note that all faculty have significant other responsibilities and most frequently travel. Further, with the exclusion of the lead instructor, assisting ENU 4192 students is not a particularly high priority for the faculty, who must focus on their own teaching, research, chasing money, mentoring graduate students, committee work, etc. before helping you all on this course.

In short: poor planning on your part does not constitute an emergency on our part.

Collaboration

The project will be done in groups. I will assign the groups. A peer review system is in place to assure equitable workload. In the event the workload is not equitable, I reserve the right to adjust individual grades to accurately reflect contributions to the work.

The ground rules for collaboration should be decided by each group through compromise and consensus. However, regardless of the preferences of the group as a whole, each student retains the individual right to privacy and to maintain good mental and physical health. To this end, no student shall be compelled:

- To join a real-name social networking site or modify their existing use of such a site, or
- To accept a 24/7 or other onerous on-call policy.

That is: each member holds a unilateral veto on using Facebook (or some such) for your group's work or for being contacted at all hours of the day and night.

Inter-personal issues within your group stemming from deciding group rules must be brought to me *promptly* for arbitration. This arbitration will focus on the guidelines above and in forming an equitable compromise (essentially, equal marginal/new inconvenience) among group members and not on determining whose activities outside this course (including personal pursuits, situations, and choices) are more meritorious.

The following collaborations between groups are allowed, though not required:

- Sending links to files/resources or the resources themselves, provided they were written by someone not in the course. For example, you may send web links, PDFs, online calculation tools, etc.
- Assisting one another with debugging code input files.

The following collaborations between groups are not allowed:

- Exchange of any files, including code input files, code output files, calculation files, and reports (including in PDF format) that you prepared yourself.
- Providing information known to be wrong or any other form of sabotage.

Computers/Software/Canvas

A research computing (HiPerGator) allocation of 32 cores was made available for this course in previous years. It will be requested for this course; however, HiPerGator policies change from time to time and access is not guaranteed. If available, this will be a shared resource between all groups. *No drama will be tolerated regarding the distribution of this resource between the groups.* In the event of such drama, I will request that the allocation be *revoked*.

ENU 4192 is often quite taxing on student computers, particularly for those that are nearing end-of-life status, as befits many students' final undergraduate semesters. It is important that you develop a plan for how to move forward if your computer fails and requires either replacement or a long repair time. There are no program-level resources, beyond my recommendations for how reallocate work within your group, available to help with personal computer issues.

I will not open e-mailed files from students in the following formats: .ppt, .pptx, .doc, .docx. Presentation and word processing documents are best converted to .pdf. I will open spreadsheets in .csv, .xls, or .xlsx format.

The Canvas platform will be used for file storage, assignment posting, and posting grades. I take no responsibility for downtime of this service, nor for actions of University of Florida staff that affect the website (including Canvas upgrades).

Reports

You will receive formal assignments for each of these, including detailed grading and logistical information. Detail instructions on turn-in are provided as part of these assignments. For Reports 1-3, progress milestones for all future reports are included, in draft form. The assignments will be finalized a minimum of one week before the due date for Reports 1 and 3 and two weeks before the due date for Reports 2 and 4.

A peer review system is in place to assure equitable workload. In the event the workload is not equitable, I reserve the right to adjust individual grades to accurately reflect contributions to the work.

You must write your reports in either Microsoft Word or L^AT_EX. Professional document and figure standards will be enforced on the project; *the onus is on you to figure out how to meet these standards in whatever programs you use to write the document and make figures*. I have no sympathy and will offer no accommodations for those who select a word processor without knowing how to format their text using it – complaints that the standards are not the same as a particular piece of software’s defaults will fall on deaf ears. The same principle applies to “upgrades” to your writing environment that break formatting.

Feedback

You will receive feedback live at all informal discussions and presentations and in written form for reports. It is vital that you respond to feedback by improving your work *promptly*. Do not wait for the grade to come in before responding to the live feedback in the presentation and any early written feedback. You should have already made progress by the next week’s informal discussion. Issues brought up in one presentation that are not addressed by the next will lead to *major* reductions in your grade.

Consider: if you were working in a real reactor vendor design group, would your supervisor tolerate a 3-4 week turnaround time for response?

Key Success Strategies

1. Particularly in the first 6-8 weeks of the course, focus on the longest sequential process in the course – selection of core materials (excluding enrichment/fissile fraction and/or burnable poison), geometric design of core, basic thermal analysis (in-core), determination of enrichment and burnable poison, detailed thermal analysis (in-core) including coupling to reactor physics, [optimization/iteration, if needed], heat exchanger design, power cycle design, detailed economic analysis. No more than 2 of your group members should be focused on other areas, such as instrumentation/controls or shielding, at this time.
2. Be clear what your time frame is when asking me questions such as, “Is this enough work on instrumentation/economics/licensing?” I answer these questions as presented, which has often been in the present tense, leading to student frustration when time passes and their stagnated work falls back below expectations. A level of work that is adequate (for example) for the informal discussion on February 17 may not meet the requirements for Report 2 and will be woefully short for Report 3.

E-mail

The primary means of communication with the class outside of class time will be e-mail listserv. These listserv will send to your @ufl.edu address only. Any inquiries regarding grading will be directed towards your @ufl.edu address only, per FERPA .

Technical and procedural questions will be answered as a reply to whatever e-mail address you used to send them. If the entire class will benefit from the answer, I may send to the class list (either in lieu of or in addition to a direct reply to you, at my discretion). If you do not wish to have a specific e-mail to me regarding technical content or course procedures replied to through the class list, you must explicitly state this in that e-mail. In such a case, I will reply directly to

you and send a general-purpose announcement to the class list, not indicating who caused me to send it.

Letters of Recommendation/Evaluation Policy

To request a letter of recommendation/evaluation (for graduate school or otherwise), you must provide (all in a single e-mail):

- A copy of your UF transcript.
- A copy of a résumé (or CV).
- A copy of the following form with all four circles checked (requests with three or fewer circles checked will be denied):
<http://www.registrar.ufl.edu/pdf/ferparelease.pdf>.

Letters are typically filed once per week. For students whom I know only through coursework, my letter typically focuses on an estimate of their rank-in-class and on their performance on projects and challenging problems.

I will only file *one batch* of letters per student during the term, for any student currently enrolled in a class with me. (This policy is designed to keep me from looking up slight changes in your rank/performance multiple times for multiple batches of letters.) I recommend that this batch occur as late as possible in the term to allow me sufficient information (sample size) on your performance to write a useful letter.

I reserve the right to refuse provide a letter for any student and am not obligated to provide a reason for such refusal.

Syllabus Boilerplate

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to me when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluations

The University of Florida expects students to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/>

Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>

Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>

University Honesty Policy

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Commitment to a Safe and Inclusive Learning Environment

The Herbert Wertheim College of Engineering values broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Undergraduate/Graduate Program Coordinator
- Robin Bielling, Director of Human Resources, 352-392-0903, rbielling@eng.ufl.edu
- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, taylor@eng.ufl.edu
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, nishida@ufl.edu

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:

<https://registrar.ufl.edu/ferpa.html>

Campus Resources

Health and Wellness

U Matter, We Care

Your well-being is important to the University of Florida. The U Matter, We Care initiative is

committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Counseling and Wellness Center:

<http://www.counseling.ufl.edu/cwc>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Discrimination, Harassment, Assault, or Violence

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the Office of Title IX Compliance, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, title-ix@ufl.edu

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or <http://www.police.ufl.edu/>

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu

<https://lss.at.ufl.edu/help.shtml>

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.

<https://www.crc.ufl.edu/>

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources.

<http://cms.uflib.ufl.edu/ask>

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

<https://teachingcenter.ufl.edu/>

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

<https://writing.ufl.edu/writing-studio/>

Student Complaints Campus:

https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf

On-Line Students Complaints:

<http://www.distance.ufl.edu/student-complaint-process>