Memorandum

December 11, 2013

To: Executive Committee
   Faculty Senate

From: Valerie Balester, Chair
       W and C Course Advisory Committee

RE: Request for course additions to the W/C Course graduation requirement

The W and C Course Advisory Committee voted to approve the following courses. The W and C Course Advisory Committee reviewed each course and agreed that all aspects of the courses were consistent with guidelines for the W or C Course status requirement. Therefore, these courses should be included in the “W Designated Course” or “C Designated Course” category to meet the writing/communication requirement for graduation.

Courses submitted for W recertification:

a. GEOL 440 Engineering Geology
b. NUEN 405 Reactor Experiments
TO: Faculty Senate Executive Committee

FROM: Valerie Balester, Chair, W and C Course Advisory Committee

CC: Frank Hopf, Department of Geology & Geophysics
    Rick Giardino, Head, Department of Geology & Geophysics
    Sarah Bednarz, AOC Dean, College of Geosciences

DATE: November 21, 2013

SUBJECT: REPORT ON RECERTIFICATION OF W COURSE: GEOL 440

We recommend that GEOL 440 Engineering Geology be certified as a writing (W) course for four academic years (9/13 to 9/17). We have reviewed a representative syllabus and have determined that the course meets or exceeds the following criteria:

1. Percentage of final grade based on writing quality: 60%
2. Course content appropriate to the major
3. Total number of words: 3200
4. Instructor to student ratio for one section: 1:20

Students write a report on sinkholes, a site visit report, a slope stability report, and two goal assessment reports (related to the project goals). Of these, the sinkhole report and goal assessments are written individually. However, the other reports require that individual students contribute a set portion of at least 500 words, so that each student writes at least 2200 words. Students turn in rough drafts, which are evaluated by the instructor through extensive written comments. As an element of instruction, the instructor requires writing center consultations with a 300-word reflection on the process. In addition, the instructor conducts 40-minute lecture/discussions after the papers are returned over common mistakes and areas for improvement for the group as a whole. Since much of the research paper preparation involves actual literature research, the research librarian for geology delivers a 40-minute lecture on research resources and techniques.
TEXAS A&M UNIVERSITY W & C COURSE ADVISORY COMMITTEE
Request for W or C Course Status
Submitted to the Chair, W & C Course Advisory Committee
University Writing Center, MS 5000

1. This request is submitted to Valerie Balester, Chair, W & C Course Advisory Committee, and concerns
(enter prefix, number, and complete course title):

GEOL 440-Engineering Geology

2. Have this form signed by both the department head and the college dean. Provide a copy of the
syllabus to the college dean.

3. Once signed, please submit this form to the University Writing Center, MS 5000.

Instructor / Coordinator: [Signature] 11/19/13
Printed name and signature (Date)
Received: [Signature] 11/12/13
(W Course Coordinator, University Writing Center) (Date)

Approvals:

College Dean: [Signature] Printed name and signature (Date)

Department Head: [Signature] 11/13
name and signature (Date)

1.214 Sterling C. Evans Library
5000 TAMU
College Station, TX 77843-5000
Tel. 979.458.1455 Fax 979.458.1466
writingcenter.tamu.edu

RECEIVED
NOV 12 2013
By UWC
SYLLABUS (REVISED 8/30/2013)
ENGINEERING GEOLOGY
TAMU UNIVERSITY
FALL SEMESTER, 2013

INSTRUCTOR
FRANK HOFF, Ph.D. P.E.

COURSE
GEOLG 440-501

OFFICE HOURS: (APPOINTMENTS ALSO AVAILABLE)
TUESDAY 1:15 - 2:30 PM
THURSDAY 10:00 AM - 11:00 AM
OFFICE: HALB 212
CLASS MEETS EVERY T-TH 8:00AM-9:15PM IN HALB 105

PHONE: 845-xxxx
E-MAIL: fhoff@tamu.edu

Statement:
Geology 440 is a course designed to permit geology majors to explore applying geological knowledge to assist in the development of infrastructure required by society and to protect and properly utilize geological resources. It will introduce students to the roles, responsibilities, and methods of professional geologists involved in advising engineers and environmental specialists. It is a writing intensive course because written reports represent the official method that professional geologist communicate their findings, ideas, and recommendations to the engineer/environmental specialist and society at large. It also includes an opportunity to present finding and ideas to an interested public, increasingly a task the professional geologist finds in their job. Whereas a civil engineer often represents the primary customer for the work product of professional geologists, the needs, interests, and limitations of those professionals will be explored.

To prevent the course from becoming more about the instructor than the students, we will focus on measureable goals for each class, recommended by the instructor but augmented and modified by class member suggestions. The course will also emphasize "Key Learning Points" (KLPs). These are defined as the two or three learning points identified by each student for themselves after each lecture, discussion, lab, and project. It is very important that every student record the KLPs at the end of each lecture/discussion.

Requirements:
Engineering Geology. (2-3). Credit 3. Fundamentals of soil, rock and fluid mechanics and basic engineering practices as applied to the analysis of the geologic environment for engineering uses. The course is designed for geoscience majors who have not had engineering courses.
Prerequisites: GEOL 312 or approval of instructor; PHYS 218.*
3.000 Credit hours
2.000 Lecture hours
RESOURCES & ATTENDANCE: You will need to have regular internet access for communication and out-of-class learning: NEO and e-Learning. The readings for this course will come primarily from the textbook Geology Applied to Engineering by Terry West. Other reading assignments may be made to augment the text and would come from a variety of sources, all of which will be available to you. It is imperative that you keep up with the reading schedule.

The following resources will be REQUIRED to successfully pass this course.
1. Access to internet/web - TAMU internet for official class announcements and e-learning to access grades and class PowerPoint presentation materials.
2. The main text for 440 will be "Engineering Geology" by F. G. Bell. ISBNs:978-0-750-68077-6 and 978-0-080-46952-2. Also "Engineering Geology Principles and Practice" edited by Michael H. de Freitas ISBN: 978-3-540-29249-4 (Print) 978-3-540-68626-2 (Online) will be used in parts. Both texts are available by online access through the Texas A&M library, however the Bell book has locks and cannot be downloaded or copied. It is likely that students will not necessarily need to purchase the de Freitas text.
3. Exam books and & soft lead pencils for exams.
4. Access to internet and Texas A&M University library resources to complete other readings that may be assigned during the semester.
5. Access to GOOGLE Earth, a free internet access program from Google.

Evaluation / Grading:
Grades will be determined on a percentage basis with the standard 90.0% to 100.0% earning an A; 80.0% to 89.9% a B; 70.0% to 79.9% a C; 60.0% to 69.9% a D; and with those not achieving 59.9% or more earning an F or Failing grade. Please note that 89.9% does not round to an “A” grade.

The final grade will be determined from the following graded items:
1) Project 1 Louisiana Sinkhole Report – 10% (Individual report – 600 word minimum)
2) Project 2 Site Visit Report and Lecture for field trip – 10% (Team report, each member responsible for 500 word minimum section)
3) Project 3 Engineering materials Report – 10% (Team report, each member responsible for 500 word minimum section)
4) Project 4 Slope–stability Report – 10% (Team report, each member responsible for 600 word minimum section)
5) Goal Assessment 1 – 10%
6) Goal Assessment 2 – 10%
7) Lab grade - 25%
8) Class and field trip participation grade (including unannounced quiz grades) - 15%

Whereas, Geology 440 is a writing intensive course, to pass the course, an average minimum grade of 60.0% must be achieved on the items 1 through 4 above. Rough drafts of all writing assignment will be graded, with the draft grade counting 25% of the total grade for the assignment. I encourage students to use the Texas A&M Writing Center to achieve their goal and at least one consultation with the Center will be required as part of the course, including a graded 300-word description of lessons learned through the consultation.
This course also has a required field trip scheduled for the weekend of October 4 (7AM) through October 6, 2013 (2PM)

**Classroom Policies:**

Policy 1 - E-mail will never replace face-to-face communication so if you have questions or concerns, particularly about a grade, plan to visit me during office hours or schedule a non-office hour face-to-face meeting. I am not permitted by university rules to share grade information with you by e-mail. Office hours are for you so try to take advantage of them.

Policy 2 - Since classes here at Texas A&M are flights of learning, we will follow FAA rules and insist that all electronic devices be turned off when the door shuts to start class and remain turned off until the class ends. The electronic devices (computers and tablets) may be used exclusively during class to take notes. Students found, however, reading/sending e-mail, texting, or using other forms of social media to communicate with others on their approved electronic note-taking devices during class will be suspected of boredom. Bored students will be required to prepare and present half of the next class lecture.

One student volunteer for each class will be asked to keep their cell phone on to enable receipt of Code Maroon messages.

Policy 3 - If you have to arrive late or leave early, please do so as quietly and as non-disruptively as possible. If you have a situation that necessitates frequent late arrivals or early departures, please let me know. If you have to leave early, it is best to explain the reason to me before class in case there is a quiz.

Policy 4 - The university policy is to not allow food and drink in lecture halls. I will enforce the rule after the fact, if there is no trash (including newspapers) or mess in your area after the class ends, I will consider the spirit of the policy adhered to. All responsible geologists and engineers “Pack in and Pack out”. I expect you to do the same in class, with your participation grade at risk if you fail to develop this critical professional standard.

Policy 5 - Have fun and do not stress too much. Please talk to me if you start to feel overwhelmed in this class for any reason. If you concerned about achieving a certain grade to be sure you can get into a major or graduate, or stay in good academic standing, or to keep a scholarship or whatever, if you come to my office hours and identify your concern early in the semester, I will be happy to work with you to help YOU achieve your goal. Remember, however, that coming to me or any other instructor with only hours left in the semester to request help to achieve a needed grade level does not work for anyone.

**· Academic Integrity Statement:**

Like all true Aggies, I will not tolerate any form of dishonesty (personal and academic). The Aggie Honor Code is: "An Aggie does not lie, cheat, or steal or tolerate those who do." Nothing is worth the consequences of violating the honor code so please don't even think about it, not in school or in your professional life.

- **Questions:** YES, ask questions. Be inquisitive. The best questions start with why, where, or who. If you are curious or unsure, probably others in class are thinking the same thing. I will respond. Please communicate with me; I realize this is a large lecture section so if you are hesitant to ask questions in front of everyone, at least ask after class or during office hours.

- **Communication/Office Hours:** I try to return phone calls and emails in a timely manner and I do my best to keep office hours. When emailing me, please write out your name inside the message as well as filling in the subject line. Remember, important communication should be in person. Please use your TAMU e-mail account when e-mailing me as I often delete without opening non-TAMU e-mail I do not recognize as a security provision. I also treat all e-mails as important and tend to treat all e-mails marked "urgent" with distain because most of the ones I have received so marked have NOT been urgent. I tend to delay opening them.

- **FERPA/grade disclosure:** All personal information concerning your performance/grade in this course is covered by federal privacy legislation. No grades or status questions will be addressed over the telephone or by email.

The [Americans with Disabilities Act (ADA)](http://www.tamu.edu/aggiehonors) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B118 of Cain Hall. The phone number is 845-1637.

**Copyright and Plagiarism Policy**

All materials used in this class are copyrighted. These materials include, but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted.

As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated and knowledge shared. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, [http://student-rules.tamu.edu/](http://student-rules.tamu.edu/), under the section "Scholastic Dishonesty."
Course Outline and Textbook Reading Assignments

NOTE: BELOW SCHEDULE SUBJECT TO CHANGE PENDING CLASS INPUT AND INSTRUCTOR’S CHANGE IN EMPHASIS

Week 1  Course and class introductions
         Organization of Field Trip teams
         Assignment of "Louisiana Sinkhole Project"
         Introduction to Engineering Geology (reading de Freitas book Chapter 1)

Week 2  Soils and rock engineering properties (reading de Freitas Chapter 2)

Week 3  Rough draft of Louisiana Sinkhole Report due (9-10-2013)
         Rock types, stratigraphy, and structures (reading Bell Chapters 1 and 2)
         Graded Louisiana Sinkhole report draft return to students (9-12-2013)

Week 4  Weathering
         Fluvial processes (Bell chapter 3 to page 114)

Week 5  Glaciation (Bell chapter 3 114 - 126)
         Class time to work on Field Trip Reports

Week 6  Aeolian processes and deserts (Bell pages 126 to 135)
         Draft field trip reports due 10-1-2013
         Coastal Processes (Bell p135 to end of chapter)
         Graded Draft Field trip reports returned 10-3-2013)

October 4-6  Field Trip with GEOL 320 (Austin City Limits Volcano, Barton Springs,
              Perdanales Falls, Enchanted Rock, Limestone cavern, Canyon Lake “Spillway,”
              Devils Backbone, subject to revision)
              – In bus team project presentations (Project 2)

Week 7  Site investigation and mapping (Bell Chapter 7)
         Goal Assessment 1 (10/10/2013)
         Field Trip Reports due EOD 10/11/2013

Week 8  Behavior of Soils and Rocks (Bell Chapter 5)
         Assignment of Borrow Pit Report.

Week 9  Geological material used in construction
         (Bell Chapter 6)

Week 10  Ground-water and contamination (Bell Chapter 4)
Borrow Pit Draft report due in class 10/29/2013
Returned graded draft - 10/31/2013

Week 11
Excavation and Slope Stability (Bell Chapter 9 to page 501)
Borrow Pit Final report due EOD (11/5/2013)
Assignment of Kelso Landslide project

Week 12
Goals Assessment 11/12/2013
Class time to work on Kelso Landslide project

Week 13
Reservoirs, Dams, Tunnels, Highways, Pipelines and Foundations (Bell Chapter 9 p 501 to end)

Week 14
Natural Hazards Reports (Bell Chapter 8)
Draft Kelso Landslide report due (11/26/2013)
Thanksgiving Break

Week 15
Graded Kelso Landslide draft returned (12/3/2013)
Course summary
Final Kelso Landslide report due 12/9/2013 at 3 PM

PLEASE READ THE SYLLABUS CAREFULLY AND SIGN BELOW
I have my own copy of the syllabus and I have read through it.
I understand the grading process in this course.
I take responsibility to access NEO and VISTA (eLearning) accounts as necessary.
I am aware that the instructor will only post evaluation results on an electronically controlled location. Grades and point totals will not be given over the phone or via email.
I know and understand the Aggie Honor Code.

Signature ________________________________ Date ____________________
TO: Faculty Senate Executive Committee
FROM: Valerie Balester, Chair, W and C Course Advisory Committee
CC: Dan Reece, Department of Nuclear Engineering
     Yassin Hassan, Head, Department of Nuclear Engineering
     Valerie Taylor, AOC Dean, Dwight Look College of Engineering
DATE: October 15, 2013
SUBJECT: REPORT ON RECERTIFICATION OF W COURSE: NUEN 405

We recommend that NUEN 405 Reactor Experiments be certified as a writing (W) course for four academic years (9/13 to 9/17). We have reviewed a representative syllabus and have determined that the course meets or exceeds the following criteria:

1. Percentage of final grade based on writing quality: 85%
2. Course content appropriate to the major
3. Total number of words: 7050 individual and 6000 more collaboratively
4. Instructor to student ratio for one section: 1:11

Graduate Assistant Teachers assist with the grading in NUEN 405, under the supervision of a faculty member. Students write five technical memos on laboratory experiments and three lab reports on experiments. Two of the latter are completed collaboratively. For instruction, templates are provided for both the technical memoranda and the formal lab reports. Feedback on the five memos is iterative. They are returned in a timely manner, and students may revise these for grammar and writing style after initial grades are returned, which allows for improvement throughout the semester. On all assignments, students receive detailed comments regarding the writing style that can be taken into account on subsequent writing. Instruction includes a dedicated lecture on technical writing, writing samples (i.e., journal articles), and examples of key sources for information on appropriate format and writing techniques (i.e., the AIP Style Guide, format guidelines for key journals in the field, and general style guides such as The Elements of Style by W. Strunk and E. B. White). For each assignment, students work from a template that outlines key sections that should be included. Individual lab procedures provide specific topics that should be included in each section of the memorandum or report.

No significant changes have been made since original certification.
TEXAS A&M UNIVERSITY W & C COURSE ADVISORY COMMITTEE
Request for W or C Course Status
Submitted to the Chair, W & C Course Advisory Committee
University Writing Center, MS 5000

1. This request is submitted to Valerie Balester, Chair, W & C Course Advisory Committee, and concerns
   (enter prefix, number, and complete course title):
   
   NUEN 405 Nuclear Engineering Experiments

2. Have this form signed by both the department head and the college dean. Provide a copy of the
   syllabus to the college dean.

3. Once signed, please submit this form to the University Writing Center, MS 5000.

Instructor/Coordinator: W.D. Reece
Printed name and signature

Received: Valerie Balester 11-20-13
(W Course Coordinator, University Writing Center)

(Date)

Approvals:

College Dean: Prasad Enjeti
Printed name and signature

(Date)

Department Head: Yassim A. Hassan
name and signature

11-19-2013
(Date)
NUEN 405 – Nuclear Engineering Experiments
Fall 2013
Course Syllabus

COURSE DESCRIPTION
This is an experimental course that will use the 5-W AGN and the 1-MW TRIGA at the NSC and other nuclear equipment. We will measure basic nuclear reactor parameters and nuclear data including many of the phenomena discussed in the undergraduate reactor physics classes (specifically NUEN 202 and NUEN 301) and we will make use of the radiation detection methods learned in NUEN 303. The measurements will be supplemented with analytical and/or numerical calculations of the same quantities and we’ll examine any differences between the calculated and experimental results. We will study reactor operation and reactor safety and demonstrate the fundamentals of how reactors are operated, how they are controlled, and what characteristics make them inherently safe.

Students will be expected to already have a working knowledge of the theoretical concepts employed in this class (for instance, students should be familiar with buildup and decay problems, the definitions of scalar fluxes and cross sections, monoenergetic and two-group diffusion theory, definition of reactivity, the Point Reactor Kinetics Equations, and coefficients of reactivity). Students should also have a working knowledge of detection systems prior to taking this class (specifically, the operating characteristics of ion chambers, fission chambers, BF3 tubes, and HPGe detectors). Students are expected to be able to program in FORTRAN.

Prerequisites: NUEN 303; NUEN 304* or senior classification.
*Note: RHEN majors are not expected to have taken NUEN 304.

CLASS TIME AND LOCATION
This course will meet three days per week. The course consists of two hours of in-class lecture and three hours of laboratory. The lectures will be held in Emerging Technology Building (ETB) Rm. 1034. The laboratories will be held at the TAMU Nuclear Science Center (NSC). Attendance to all classes and scheduled laboratories is mandatory. Only University approved excuses will be accepted.

Lecture:
All Sections: MW 1500 – 1550 hrs, ETB 1034

Recitation:
All Sections: M 1700-1900 hrs, ETB 1034
Laboratory: Lab sessions will meet as noted in the syllabus below (pp. 7-9)

Section 901: F 0800-1050
Section 902: F 1500-1750
Section 903: R 1100-1400
Section 904: R 1420-1710
Section 905: F 1130-1420
Section 906: R 0800-1050
Section 907: R 1800-2050

INSTRUCTORS
A lead professor, a lecturer, and multiple graduate assistants are available to provide instruction in this course.

Faculty:
W. D. Reece
Professor, Nuclear Engineering
Office: ZACH 58-O
Office Hours: Excellent question. We'll work it out in class.
Phone: 979-845-7551 (NSC)
Email: w-reece@tamu.edu

NataIa Ostrovskaya
Senior Lecturer
Office: 58-NB Zachry
Office hours: TBA
Phone: 979-842-4409
Email: nataia@tamu.edu

Graduate Assistants:

Name: To be assigned prior to the start of the semester.
Office location:
Office phone:
Email:
Office hours:

TEXTBOOKS AND REFERENCES
While there are no required texts for this course, a number of references should be consulted during this course:
COURSE OBJECTIVES

In completing this course the student should develop experimental expertise in the use of nuclear reactors and nuclear radiation as well as analytical and computational capabilities in modeling reactor-based experiments. This course will aid in increasing the students’ understanding of the physics of nuclear reactors and nuclear data.

The student will acquire practical experience in the safe operation of nuclear reactors using a research reactor and this experience will be applicable to larger power reactors, experimental reactors, space reactors, and other nuclear systems. The student will develop an understanding of how instrumentation is used in the control and operation of nuclear reactors and how and why various materials are chosen for the design of different nuclear systems. The student will learn (both theoretically and practically) the fundamental measurements performed to test the physics of nuclear systems. Each student will start-up a nuclear research reactor to gain practical experience in the startup of a nuclear reactor.

After completion of this course, the student should be able to:

1. Give physical and mathematical definitions of half-life, scalar flux, macroscopic cross sections, microscopic cross sections, reactivity, Doppler broadening, temperature coefficient of reactivity, the Zr-H effect, thermal cross section, 2200-n/s cross section, resonance integrals, differential and integral rod worth, subcritical multiplication, criticality, mean generation time, resonance escape probability, radiative capture, fission, photoelectric effect, Compton scattering, pair production, photoneutron sources, (n,p) neutron sources, and spontaneous fission sources.

2. Locate and apply fundamental nuclear cross section data from published sources.

3. Compare and contrast the usage of various materials as moderators, fuels, and shields based on nuclear cross section data and experimental results.

4. Design and conduct experiments to measure and calculate neutron and gamma-ray fluxes and describe the sources of uncertainty in these measurements.

5. Solve simple neutron activation analysis problems both analytically and experimentally.
6. Design, conduct, and analyze experiments to measure basic nuclear parameters (such as neutron and gamma-ray cross sections, reactivity coefficients, reactivity worth, and mean neutron generation time).
7. Infer the relationship between analytical theory and practical application in nuclear engineering.
8. Analyze physically, mathematically, and experimentally the feedback mechanisms that allow safe operation of nuclear systems (including the capability to differentiate between mechanisms in multiple fuel designs).
9. Design and conduct experiments to measure the feedback mechanisms of nuclear systems.
10. Start up a research reactor from zero power to full power under proper supervision.
11. Explain the design and usage of research and power reactor instrumentation.
12. Communicate the results of experiments and calculations effectively.
13. Discuss the application of experimental, analytical, and numerical techniques developed in class to contemporary issues in nuclear science and engineering.
14. Write a concise, accurate technical memorandum.
15. Write a comprehensive report following an accepted format.
16. Understand and work simple statistics and error propagation problems.
17. Develop/run a computer code simulating radiation transport.

METHOD OF EVALUATION

The student’s final grade will be determined based on the following percentages:

- Midterm Exam: 15%
- Technical Memoranda: 40%
- Formal Laboratory Reports (first 2): 25%
- Final Laboratory Report: 20%

Attendance at your assigned laboratory section is required. If you are unable to attend at your assigned time please inform the instructor in advance, if possible, to schedule an alternate time.

Midterm Exam

A midterm exam will be given in class on October 16, 2013. This will be a closed-book, closed-notes exam. The exam will cover topics presented in lecture and/or lab through Week 7.

Technical Memoranda and Laboratory Reports

The results and analysis for each laboratory will be submitted for credit via either a technical memorandum or a full laboratory report. A template and example for each will be provided to the student via http://ecampus.tamu.edu.

Technical Memoranda

Technical memoranda (TM) should be three pages of text or less in length but will also include a laboratory worksheet and perhaps several plots or figures. The student’s grade on technical memoranda will be determined based on the memo format (5%), clarity/writing style (10%) and technical content (85%). Each TM will be edited and returned to the student. Technical memoranda must be completed individually.
Formal Laboratory Reports

Formal laboratory reports will be less than twenty pages in length. These reports will include detailed theory, procedures, and results sections and provide the reader with sufficient information to repeat the laboratory themselves and acquire the same results as the student. The student should view these reports as if they were technical manuscripts submitted to a technical journal for publication. The student's grade on laboratory reports will be based 5% on format, 35% on grammar and writing style, and 60% on technical content. Each laboratory report will be edited and returned to the student. Guidelines for writing laboratory reports, including an example of the proper report format, will be provided to the student via http://ecampus.tamu.edu.

Formal laboratory reports for Labs 4 and 8 may be completed in small groups (up to 3 people per group); the final report (covering the inter-related topics addressed in Labs 11, 12, 13) must be completed and submitted individually; it should be considered a final exam.

Homework Set
There will be a homework set in statistics whose grade can be substituted for the lowest Technical Memo grade.

Final Examination
A final examination for the class will be scheduled according to the approved University Final Examination Schedule. The exam will be optional. If selected, the student's grade will first be determined using the above distribution; this grade will then constitute 75% of the final grade, and the final exam will constitute the remaining 25%. The exam will be comprehensive, covering all information discussed in lectures, laboratory sessions, laboratory reports, and technical memoranda. A review sheet will be provided to the student to aid in studying for this exam.

Per the Final Exam Schedule, the exam will be held:

Tuesday December 10, 2013, 1030 – 1230 hrs

LATENESS POLICY
No reports or TMs will be accepted after the due date except for university excused absences.

ONLINE COURSE MATERIAL
An electronic copy of this syllabus, the course schedule, all lecture notes, all laboratory procedures, data tables, supplemental readings, example lab reports, and example technical memoranda will be available to the student through the University's e-learning system (http://ecampus.tamu.edu). The instructor will use the HOWDY and/or eCampus email system and discussion board to communicate important messages to the students. Students should check their email often to keep updated on current messages. Also, the student's grades will be posted on the eCampus system, and the students can use this system to check their grades at any time.

If you are unfamiliar with HOWDY, please ask the instructor or grading assistants for help or consult the Information Technology Services staff by emailing them at its@tamu.edu.
ADA STATEMENT
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cam Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu.

SCHOLASTIC DISHONESTY
As commonly defined, plagiarism consists of passing off as one’s own the ideas, work, writings, etc., that belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules [http://student-rules.tamu.edu/], under the section “Scholastic Dishonesty.”

It is very important to display academic integrity in class assignments and exams. While it is appropriate and you are encouraged to work together on some assignments, each person must turn in original work to receive credit. Exams must be taken without the assistance of others. Academic dishonesty on an exam or class assignment will result in actions as described in the honor code policies. Academic dishonesty is defined on the Aggie Honor Code website.

The Aggie Honor Code:
“An Aggie does not lie, cheat or steal, or tolerate those who do.”

For further information on the Honor Council Rules and Procedures, please see http://www.tamu.edu/aggiehonor.

RELIGIOUS HOLIDAYS
If you are a member of a religious faith that has one or more holidays which require you to be absent from any class, tell your instructor at least two weeks in advance of your absence and make arrangements to make-up the class.

UNIVERSITY WRITING CENTER
The University Writing Center (UWC), located in Evans Library 1.214 (second floor), offers help to writers at any stage of the writing process including brainstorming, researching, drafting, documenting, revising, and more; no writing concern is too big or too small. These sessions are highly recommended but are not required and will not directly affect your final grade. While the UWC consultants will not proofread or edit your papers, they will help you improve your own proofreading and editing skills. If you visit the UWC, take a copy of your writing assignment. To find out more about UWC services or to schedule an appointment, call 458-1455, browse the web page at uwc.tamu.edu, or stop by the center.
LABORATORY SAFETY

You must attend the laboratory safety briefing on your assigned date (Aug. 29th or 30th) and complete the Laboratory Safety Acknowledgement (check the box on Howdy) before September 2nd (Monday), 2013. Failure to do so may result in expulsion from the course. There are a number of safety risks in performing the laboratories including exposure to ionizing radiation and risk of shock from electronic devices. You will be informed of these risks during the general safety briefing and at the beginning of each lab. You will be instructed on how to proceed carefully to avoid these and other risks. A laboratory safety violation may result in any or all of the following: immediate expulsion from the laboratory area, a requirement to repeat laboratory training, a grade of 0 for the assignment associated with the laboratory being performed, and, depending on the severity of the infraction, a final grade of F in this course.
NUEN 405 – Nuclear Engineering Experiments  
Fall 2013 
Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Module</th>
<th>Assessment</th>
<th>Date</th>
<th>Session</th>
<th>Topic</th>
<th>Lab Section to Meet</th>
<th>Responsible Prof</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>None</td>
<td>8/29/2013</td>
<td>Lecture 01</td>
<td>Introduction, Syllabus, Course Schedule, Meeting Places and Times</td>
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<td>University Research Reactors – Applications</td>
<td>901/926/905</td>
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<td>Orientation, Safety and Security Procedures in the Lab (NSCR)</td>
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<tr>
<td>2</td>
<td>Measurement and Instrumentation</td>
<td>TM</td>
<td>9/2/2013</td>
<td>Lecture 03</td>
<td>Review Neutron Measurement and Instrumentation</td>
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<td>SOPs and Technical Specifications for the NSCR</td>
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<td>Neutron Activation Analysis</td>
<td>Formal Report</td>
<td>9/16/2013</td>
<td>Lecture 07</td>
<td>Neutron and Photon Interaction Cross Sections (+ handout)</td>
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<td>Discussion of Lab Write-ups – Common Errors and Best Practices</td>
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<td>Small Group Exercise</td>
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<td>901/902/905</td>
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<tr>
<th>7</th>
<th>Gamma Shielding</th>
<th>Lab Worksheet</th>
<th>19/7/2013</th>
<th>Lecture 13</th>
<th>Gamma Buildup and Shielding</th>
<th>DR/DF</th>
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<tr>
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<td>10/9/2013</td>
<td>Lecture 14</td>
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<td>Shielding Measurements</td>
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<thead>
<tr>
<th>8</th>
<th>Monte Carlo</th>
<th>Formal Report</th>
<th>10/14/2013</th>
<th>Lecture 15</th>
<th>Son of Monte Carlo returns</th>
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<tr>
<td></td>
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<td>Lecture 16</td>
<td>MIDTERM EXAM – covers through week 7</td>
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<tr>
<th>9</th>
<th>Control Rod Calibrations</th>
<th>Formal Report</th>
<th>10/21/2013</th>
<th>Lecture 17</th>
<th>Review: Reactor Kinetics</th>
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<td>Lecture 18</td>
<td>Positive Period Method for Rod Worth Measurements</td>
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<td>Control Rod Calibration</td>
<td>901/902/905</td>
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<table>
<thead>
<tr>
<th>10</th>
<th>Spatial Distribution of the Neutron Flux</th>
<th>TM</th>
<th>Lecture 19</th>
<th>Flux Shapes in Critical Assemblies</th>
<th>DR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Measurement of Neutron Flux Distributions</td>
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<td></td>
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<td>Laboratory 10</td>
<td>Measurement of the Neutron Flux Spatial Distribution in the NSGR</td>
<td>903/904/905/907</td>
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<td>Measurement of the Neutron Flux Spatial Distribution in the NSGR</td>
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<td>11/6/2013</td>
<td>Lecture 22</td>
<td>Xenon Poisoning</td>
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<td>11/7/2013</td>
<td>Laboratory 11</td>
<td>Measurement of NSGR Power Coefficients of Reactivity</td>
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<td></td>
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<td>11/8/2013</td>
<td>Laboratory 11</td>
<td>Measurement of NSGR Power Coefficients of Reactivity</td>
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** Labs 11, 12, 13 will be combined in a single formal lab report.**

<table>
<thead>
<tr>
<th>12</th>
<th>Delayed Neutrons</th>
<th>Formal Report**</th>
<th>11/14/2013</th>
<th>Lecture 23</th>
<th>Delayed Neutrons and Reactor Control</th>
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</tr>
</thead>
<tbody>
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<td></td>
<td></td>
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<td>11/15/2013</td>
<td>Lecture 24</td>
<td>Measurement of Delayed Neutrons</td>
<td></td>
</tr>
<tr>
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<td>11/16/2013</td>
<td>Laboratory 12</td>
<td>Measurement of Delayed Neutron Yields</td>
<td>903/904/905/907</td>
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<td>Measurement of Delayed Neutron Yields</td>
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** Labs 11, 12, 13 will be combined in a single formal lab report.**

Lab via video
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<tr>
<td>13</td>
<td>11/19/2013</td>
<td>Lecture 25</td>
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<td>11/20/2013</td>
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**Labs 11, 12, 13 will be combined in a single formal lab report.**

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<tr>
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<td>11/25/2013</td>
<td>Lecture 27</td>
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<td>Lecture 28</td>
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<td>12/20/2013</td>
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