# Undergraduate Council Minutes of Meeting February 1, 2011 

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# The University of Tennessee, Knoxville Undergraduate Council Minutes of Meeting February 1, 2011 3:40pm - University Center Ballroom 

MEMBERS PRESENT: Richard Bayer, Chuck Collins, Ruth Darling, Jeff Fairbrother, Tom George, R.J. Hinde, George Hoemann, Greg Kaplan (Chair Elect/Vice Chair), John Koontz (Chair), Maura Lafferty, Jon Levin, Catherine Luther, Norman Magden, Jeff Mellor, Mark Moon, John Mount, Rebekah Page (for Steve Dandaneau), Masood Parang, Bill Park, Fred Pierce, Randal Pierce, Chris Pionke, Gary Ramsey, Harold Roth, Lisi Schoenbach, Matthew Theriot, Dixie Thompson (Past Chair), Scott Wall, Pia Wood, Suzanne Wright

OTHER ATTENDEES: Fadia Alvic, Catherine Anderson, Monique Anderson, Richard Aquilla, Sally McMillan, Cheryl Norris, Missy Parker, Susan Ratliff (for Donna Thomas), David Reidy, Margie Russell

The meeting was called to order at 3:45pm by John Koontz, Chair.
R. J. Hinde was welcomed to the UG Council meeting. He is the new associate dean for the College of Arts and Sciences.

The minutes of the October 26, 2010, meeting of the Undergraduate Council were approved.

## Committee Reports

- Academic Policy (Magden) -see pages U1853-U1857
o John Koontz (for Norman Magden) reviewed the Academic Policy Committee's work. The undergraduate drop policy eliminates the WP/WF grading mode and limits students to four drops in their academic career. The transfer admission policy includes a more holistic review of applicants and does not guarantee admission to those completing articulation agreements. The revised math requirement in the freshman admission policy better reflects state board recommendations. All policy changes were approved.
- Advising (Darling) - see pages U1858-U1859
o Ruth Darling provided a brief report on the committee's last meeting. Members discussed the advising implications of the proposed drop policy and the transfer admission policy.
- Appeals (Park) - NO REPORT
- Associate Deans Group (McMillan)—see pages U1860-U1862
o Sally McMillan updated members on the group's recent discussions which included summer school, the Top 25 initiative, and universal tracking.
- Curriculum (Theriot)—see pages U1863-U2038
o Matthew Theriot summarized the Curriculum Committee's recommended changes. All curricular changes were approved. The philosophy proposal sparked a larger discussion about a department's responsibility when considering elimination of high-enrollment general education courses.
- General Education( Collins) -see pages U2041-U2043
o Chuck Collins highlighted the recent general education changes. All course additions, deletions, and revisions were approved. Further discussion regarding availability of general education courses ensued. The General Education Committee (and perhaps the General Education Task Force) will reexamine the standards for approving new general education courses as well as reassess the procedure for eliminating courses. Two corrections to the meeting minutes were noted: (1) A new Arts and Humanities subcommittee chair has not yet been named, and (2) PHIL 345 (Bioethics) was added to the WC list.


## Banner-Related Revisions from Spring 2011 Registration - see pages U2039-

 U2040- The minor revisions submitted align the catalog with Banner enforcement changes made during Spring 2011 registration.

The meeting was adjourned at 4:40pm.

## ACADEMIC POLICY COMMITTEE REPORT

December 1, 2010 Meeting Minutes<br>Present: Norman Magden, chair, John Koontz, Catherine Luther, Sally McMillan, Cheryl Norris, Michael Palenchar, Masood Parang, Missy Parker, Kathy Warden (for Monique Anderson)

## Recommended Revision-Course Drop Policy

## Changes in Registration

Undergraduate students may add courses through the tenth calendar day counted from the beginning of classes fall and spring terms. Because of the nature of some courses, permission of the department head may be required to add a course after classes begin. Students may also, as departmental policies permit, change a section of a course through the add deadline.

Students may drop courses until the 10th calendar day from the start of classes with no notation on the academic record for full term courses in fall and spring.

From the 11th day until the 84th calendar day, students may drop courses and will receive the notation of W (Withdrawn) for full term courses in fall and spring. Following are additional regulations related to dropping classes after the $10^{\text {th }}$ day

- Students are allowed four drops during their academic career.
- Students are allowed to drop only one course each academic year.
- The W grade is not computed in the grade point average.
- After the 84th day, no drops are permitted.
- Students must pay a Late Drop Fee for each course dropped. Change of Registration Fee when dropping classes
- Courses may be dropped on the web (https://myutk.utk.edu/). (http://cpo.utk.edu).

Failure to attend a course is not an official withdrawal and will result in the assignment of an F grade.
The periods for add, drop, change of grading for sessions within the full term, summer, and mini term are determined based on a percentage of the equivalent deadline for the full term. See Timetable of Classes each term for exact dates on the MyUTK Gircle Park website at https://myutk.utk.edu/ http://cpo.utk.edu. Deadline dates may be adjusted if the deadline falls on a holiday, weekend day or spring recess.

## Formerly:

Changes in Registration
Undergraduate students may add courses through the tenth calendar day counted from the beginning of classes Fall and Spring terms. Because of the nature of some courses, permission of the department head may be required to add a course after classes begin. Students may also, as departmental policies permit, change a section of a course through the add deadline.

- Students may drop courses until the 10th calendar day from the start of classes with no notation on the academic record for full term courses in fall and spring.
- From the 11 th day until the 63rd calendar day, students may drop courses and will receive the notation of W (Withdrawn) for full term courses in Fall and Spring.
- The $W$ grade is not computed in the grade point average.
- Courses may be dropped on the web (https://myutk.utk.edu/).
- After the 63rd calendar day and to the 84th day of classes, courses may be dropped and will be assigned a WP (Withdrawn Passing) or a WF (Withdrawn Failing) for full term courses in fall and spring. Instructor's signature is required. The form, once signed, should be taken to the Office of the University Registrar for processing.
- After the 84th day, no drops are permitted.
- The periods for add, drop, change of grading for sessions within the full term, summer, and mini term are determined based on a percentage of the equivalent deadline within the full term. See Timetable of Classes each term for exact dates on the MyUTK website at https://myutk. utk.edu/. Deadline dates may be adjusted if the deadline falls on a holiday, weekend day or spring recess.
- Failure to attend a course is not an official withdrawal and will result in the assignment of an F grade.


## Rationale:

Presently there are four distinct drop periods: 1) the first 10 days (when students may drop and add freely); 2) the $11^{\text {th }}$ day to the $63^{\text {rd }}$ day (when students withdraw with a grade of $W$ ); 3 ) the 64th day to the $84^{\text {th }}$ day (when students will receive grades of WP or WF); 4) after the $84^{\text {th }}$ day (when no drops are permitted at all). Until recently, students were allowed to drop with a W only until the $42^{\text {nd }}$ calendar day (six weeks). Significantly, at the same time that the W drop period was extended, the importance of the WF grade was downgraded. Previously the WF was averaged into the GPA as an F. Now, the W, WP, and WF in effect are equal in terms of their impact on the academic record. This is a very liberal drop policy, one that does little to discourage or deter dropping classes and one that leads to inefficiencies in the delivery of instruction. Several universities have moved to a policy of simply limiting the number of courses students may drop. This essentially minimizes the debate over the proper drop period and also eliminates the need for differentiated drop grades. The following proposed policy is based on review of policies at institutions such as Florida, Georgia, LSU, and the University of Washington.

## Recommended Revision-Transfer Admission Policy

## General Transfer Admission Policies

The University of Tennessee, Knoxville (UTK) has a competitive admission process for transfer students. Students will be reviewed holistically on factors such as high school and transfer GPA, ACT/SAT scores, and intended major field of study. Grades earned at other colleges and universities are used only for admission, course placement, and other academic decisions. They are not included in the UTK GPA.

Students should be aware that many UTK majors require completion of an intermediate level sequence of a foreign language, and some majors require more advanced math and science requirements than required by other public universities and colleges in the state of Tennessee.

Transfer students should review the detailed transfer information on major/degree requirements for their prospective UTK major. The following link contains information to assist transfer students in determining these requirements: http://registrar.tennessee.edu/transfer/agreements.shtml

Prior to graduating from UTK, transfer students must have completed their last 30 semester hours of credit at UTK and at least 60 semester hours of credit at a four-year college or university.

## Students Applying for Transfer Prior to Degree Completion

At the time of application, a transfer applicant must have completed at least 15 credit hours of transferable college work. Only those courses in which at least a grade of $C$ was earned will be eligible for transfer credit.

Transfer applicants from institutions in the University of Tennessee (UT) or Tennessee Board of Regents (TBR) systems who have not earned an Associate of Arts or Associate of Science Degree but who have been certified by the institution from which they are transferring as having completed all the general education requirements of that institution will have completed general education requirements for the University of Tennessee, Knoxville. They will not be required to take any additional coursework to meet general education requirements at UTK. Similarly, transfer applicants from institutions in UT or TBR systems who have been certified by the institution from which they are transferring as having completed sub-section(s) of general education (e.g., Natural Sciences) at that institution will be credited for completing the same section (if it exists) at UTK. The acceptance of certified general education completion does not imply that the student has met any other admission or degree requirements at UTK.

Certification of general education completion must be provided by the institution at which the courses were taken. Certification must occur at the time the student transfers to UTK. No retroactive certification will be accepted. Acceptance of certified completion of general education will begin at UTK in Fall 2011.

## Students Applying for Transfer with an Associate of Arts or Associate of Science Degree

Students who have completed an associate degree and who have followed an a statewide articulation agreement with a public university or college in the state of Tennessee will be given priority consideration. However, the admission process is still competitive and still holistic. Completion of an a statewide articulation agreement is not a guarantee of admission to the University of Tennessee, Knoxville (UTK) or to a specific program.

Transfer applicants who have earned AA or AS degrees from institutions in the University of Tennessee (UT) or Tennessee Board of Regents (TBR) systems will have fulfilled the general education requirement established by the faculty at UTK. Transfer of general education courses from UT or TBR universities or colleges is guaranteed upon
completion of the AA or AS degree. The requirements of general education will be complete and accepted by UTK in the transfer process without loss of credit.

- Upon completion of the AA or AS degree, transfer credit will be granted as part of the transfer process.

Formerly:
Transfer Admission

## Students Applying for Transfer Prior to Degree Completion

The University of Tennessee, Knoxville (UTK) has a competitive admission process for transfer students. The admission decision for transfer students with fewer than 30 earned transferable college-level hours will be based on their high school GPA, ACT/SAT scores, and a minimum required college GPA of 2.50. At the time of application, a transfer applicant must have completed at least 15 credit hours of transferable college work. The admission decision for transfer students with at least 30 earned transferable college-level hours will be based largely on students' academic performance at their previous institution(s). In order to be considered for admission to UTK, a transfer applicant must have a minimum of a 2.00 grade point average (on a 4-point scale) in college credit courses eligible for transfer credit. Academic colleges or departments may require greater than a 2.00 for acceptance into certain programs.
The transfer admissibility GPA is calculated using all grades attempted, including repeated coursework, in college level or non-remedial courses. Transfer grade averages are calculated by UTK and frequently differ from averages calculated by other institutions. Only those courses in which at least a grade of $C$ was earned will be eligible for transfer credit. Grades earned at other colleges and universities are used only for admission, course placement, and other academic decisions.
Prior to graduating from UTK, transfer students must have completed their last 30 semester hours of credit at UTK and at least 60 semester hours of credit at a four-year college or university.

## Students Applying for Transfer WITH an Associate of Arts or Associate of Science Degree from Tennessee Board of Regents

## (TBR) Community Colleges

Transfer applicants with a 2.0 college GPA (on a 4-point scale) in college-level, transferable courses who complete the Associate of Arts (AA) or the Associate of Science (AS) degree from the TBR community college system will be admissible to UTK. Academic colleges or departments may require greater than a 2.00 for acceptance into certain programs.
The transfer admissibility GPA is calculated using all grades attempted, including repeated coursework, in college level or non-remedial courses. Transfer grade averages are calculated by UTK and frequently differ from averages calculated by other institutions.
AA and AS graduates will have fulfilled the general education requirement established by the faculty at UTK. Transfer of general education courses from the TBR community colleges is guaranteed through the following guidelines:
Upon completion of the AA or AS degree, the requirements of general education will be complete and accepted by UTK in the transfer process without loss of credit.
Upon completion of the AA or AS degree, transfer credit for D's or higher will be granted as part of the transfer process.
Students should be aware that many UTK majors require completion of an intermediate level sequence of a foreign language, and some majors require more advanced math and science requirements than required by TBR community college majors. Following one of the published UTK articulation agreements is the best path to enter UTK with junior standing in a transfer student's chosen UTK major.
Transfer students should review the detailed transfer information on major/degree requirements for their prospective UTK major. The following link contains information to assist transfer students in determining these requirements: http://registrar.tennessee.edu/transfer/agreements.shtml Grades earned at other colleges and universities are used only for admission, course placement, and other academic decisions. Prior to graduating from UTK, transfer students must have completed their last 30 semester hours of credit at UTK and at least 60 semester hours of credit at a four-year college or university.
Students Applying for Transfer from University of Tennessee (UT) or Tennessee Board of Regents (TBR) Colleges and Universities WITHOUT a completed Associate of Arts or Associate of Science Degree (Effective Fall 2011)
Transfer applicants from institutions in the University of Tennessee (UT) or Tennessee Board of Regents (TBR) systems who have not earned an Associate of Arts or Associate of Science Degree but who have been certified by the institution from which they are transferring as having completed all the general education requirements of that institution will have completed general education requirements for the University of Tennessee, Knoxville (UTK). They will not be required to take any additional coursework to meet general education requirements at UTK. Similarly, transfer applicants from institutions in UT or TBR systems who have been certified by the institution from which they are transferring as having completed sub-section(s) of general education (e.g., Natural Sciences) at that institution will be credited for completing the same section (if it exists) at UTK. The acceptance of certified general education completion does not imply that the student has met any other admission or degree requirements UTK.
Certification of general education completion must be provided by the institution at which the courses were taken. Certification must occur at the time the student transfers to UTK. No retroactive certification will be accepted. Acceptance of certified completion of general education will begin at UTK in Fall 2011.
Students should be aware that many UTK majors require completion of an intermediate level sequence of a foreign language, and some majors require more advanced math and science requirements than required by other UT or TBR institutions. For students transferring from a TBR community college, following one of the published UTK articulation agreements is the best path to enter UTK with junior standing in a transfer student's chosen UTK major.
Transfer students should review the detailed transfer information on major/degree requirements for their prospective UTK major. The following link contains information to assist transfer students in determining these requirements: http://registrar.tennessee.edu/transfer/agreements.shtml Grades earned at other colleges and universities are used only for admission, course placement, and other academic decisions. Prior to graduating from UTK, transfer students must have completed their last 30 semester hours of credit at UTK and at least 60 semester hours of credit at a four-year college or university.

## Rationale:

The Complete College Tennessee Act has provisions for transfer/articulation that relate specifically to the University of Tennessee, Knoxville. Some university policies need to be changed to reflect these provisions. Following is the relevant legislation. Given the fact that UTK is allowed to "remain competitive in accordance with generally applicable policies" we need to be sure that our policies make it clear to students what the expectations and realities are regarding transfer admission.

With the holistic review process we use for admission of freshmen we have had success at increasing the academic profile of the class while retaining diversity. We have begun to use a more holistic process in recent years for transfer students and have seen an increase in the percentage of students with a transfer GPA of 3.0 or higher (from $50 \%$ to $55 \%$ ) and a corresponding drop in the percentage of students below 2.50 (from $15 \%$ to $12 \%$ ). A process for transfer students that focuses on holistic review and other issues (e.g., capacity in a major) rather than on GPA minima would seem to make good sense.

SECTION 4. Tennessee Code Annotated, Section 49-7-202, is amended by deleting subsections (e) and (f) in their entireties and by substituting instead the following:
(e)(1) The commission shall develop a university tract program within the University of Tennessee and the Tennessee board of regents systems consisting of sixty (60) hours of instruction that can be transferred and applied toward the requirements for a bachelor's degree at the public universities. The tract shall consist of forty-one (41) hours of general education courses instruction and nineteen (19) hours of pre-major courses instruction, or elective courses instruction that count toward a major, as prescribed by the commission, which shall consider the views of chief academic officers and faculty senates of the respective campuses. Courses in the university tract program shall transfer and apply toward the requirements for graduation with a bachelor's degree at all public universities.
(A) An associate of science or associate of arts degree graduate from a Tennessee community college shall be deemed to have met all general education and university parallel core requirements for transfer to a Tennessee public university as a junior. Notwithstanding this subdivision (A), admission into a particular program, school or college within the university; or into the University of Tennessee, Knoxville shall remain competitive in accordance with generally applicable policies.
(i) The forty-one (41) hour lower division general education core common to all state colleges and universities shall be fully transferable as a block to, and satisfy the general education core of, any public community college or university. A completed subject category (for example, natural sciences or mathematics) within the forty-one (41) hour general education core shall also be fully transferable and satisfy that subject category of the general education core at any public community college or university.
(ii) The nineteen (19) hour lower division AA/AS area of emphasis articulated to a baccalaureate major shall be universally transferable as a block satisfying lower division major requirements to any state university offering that degree program major.

## Lanuary 5, 2011 Meeting Minutes

Present: Norman Magden, chair, Tom Broadhead, John Koontz, Catherine Luther, Sally McMillan, Mark Moon, Cheryl Norris (for Monique Anderson), Michael Palenchar, Missy Parker, Nancy Rutherford

## Recommended Revision-Freshman Admission Policy

## REVISE FRESHMAN ADMISSION POLICY (MATH REQUIREMENT)

## Freshman Admission (Effective 2013)

The University of Tennessee calculates a core GPA based upon a four-point grading scale in high school courses in seventeen units sixteen areas:

4 units of English
2 units of algebra
1 unit of geometry, trigonometry, advanced math, or calculus
unit of advanced math (e.g., precalculus, calculus, trigonometry, statistics) advanced algebra and
1 trigonometry, statistics, discrete mathematics with statistics and probability, pre-calculus, ealculus, capstone, senior math or quantitative decision making

3 units of natural science. Students must complete Biology I, Chemistry or Physics, and a third lab science.

1 unit of American history
1 unit of European history, world history, or world geography
1 unit of additional social science (e.g., government/economics)
2 units of a single foreign language
1 unit of visual or performing arts

Courses in the list above that were taken as Honors or Dual Enrollment are given an additional halfquality point, and courses that were taken as Dual Enrollment, Advanced Placement, or International

Baccalaureate are given an additional quality point in the calculation of the core GPA. The core GPA is used as a factor in determining eligibility for admission, scholarships, and participation in the Chancellor's Honors Program.
Rationale: The language in the math requirement needs to be more specific to better match the recommendations of the state board.

## ADVISING COMMITTEE REPORT

## December 7, 2010 Meeting Minutes

## In attendance:

Beth Barret<br>Betty Bradley<br>Eric Brey<br>Kelly Brock<br>Gina Cox<br>Ruth Darling<br>Sarah DeYoung<br>Teressa Gregory<br>Mary Anne Hoskins

Tanisha Jenkins<br>Stephanie Kit<br>Ron McFadden<br>Rebekah Page<br>Bill Park<br>Missy Parker<br>Dulcie Peccolo<br>Fred Pierce<br>Randal Pierce

Anton Reece<br>Laurie Roberson<br>Brian Russell<br>Margie Russell<br>Helen Sellers<br>Michele Stauffer<br>Kathy Warden<br>Fernandez West<br>Jessica Green (guest)

Academic Policy Proposals - Transfer admission, course withdrawal (drop) - Ruth Darling provided an overview of two policies currently under review. The Academic Policy Committee will propose them at the January Undergraduate Council meeting. Policies passed by the UGC are then submitted to Faculty Senate for final approval.

Drop policy - came out of the Effectiveness and Efficiency Task Force and was drafted after reviewing UT course drop data (approximately 5000 drops during fall 2009 and approximately 500 total term withdrawals.) The Task Force also benchmarked peer institutions to derive the policy. They also looked at the pattern of drops by students at UTK; typically most occur during first and second year. No change to the first ten days of a fall or spring semester. No change to the summer/mini-term ratio of days. From the 11th through the 84th day students may drop courses via MyUTK. The academic history will show a notation of "W" which will not impact the UT GPA. Students have four such drops available to them over the course of their undergraduate career at UTK. No change to the total term withdrawal policy. TTWD are not considered to be part of the four drops.

Discussion and questions followed. The proposal also asks for a fee to be charged although no specific dollar amount has been suggested officially. Discussion about the potential fee centered on whether the fee was an effort to cover the administrative costs or revenue generating. The Academic Policy Committee is most concerned with the costs of losing seats rather than the administrative cost. Another question and discussion was whether this policy would be appealable. It was decided that this policy should be regarded similarly to the hours to graduate, 2.0 to graduate, three repeats, etc. If passed, the message to students will be clear and consistent.

Transfer admission - UT will consider Gen Ed requirements complete for students transferring in from TBR schools with an Associate's degree and/or with their Gen Ed requirements completed at the transferring institution. Transfer students from TBR schools have a minimum GPA of 2.0 to be eligible to transfer to UT. However, UT will still be able to deny admission to students based upon a competitive and holistic admissions review process and policy. Those with transfer GPA lower than 2.5 will go through holistic review. Colleges with higher GPA requirements will still be able to deny admission to students. UT will deny admission to the university for students who do not meet a college GPA requirement and who requested a major in that college. Registrars from all institutions are meeting soon to formalize a plan for transcript notations for the Gen Ed requirements.

TennACADA - Brian Russell announced the results of the recent election for officers. Katie McCay has been elected President, Jennifer Martin - Vice President, Rebecca Diemer - Communications Coordinator, and Laura Stetler - Secretary.

NACADA Region 3 Conference Update - The conference will be held here in Knoxville May 18-20. Calls for proposals are going out soon. Pre-conference workshop proposals will be due first with a later date for full proposals - mid January. Volunteers are needed. Please contact Jamia Stokes if interested as she is the volunteer coordinator. George Drinnon is coordinating the research symposium that will be held on May 17 before the conference. NACADA is updating the website and registration will open soon. Arts \& Sciences is providing registration fees for some faculty advisors who may be interested in attending.

Advising Award follow-up - Ruth indicated that it has not been determined whether students received notification about the awards. Some deans sent information to staff, faculty and students in their colleges but others did not.

Other announcements - Sarah DeYoung was presented with a framed certificate and a round of applause thanking her for her dedication and service to the Advising Committee as she approaches her retirement from the University.

Upcoming Advising Committee Meetings:
1/25/2011 Tue 3:30 PM 5:00 PM BCC: 102-104 2/22/2011 Tue 3:30 PM 5:00 PM BCC: 102-104
3/22/2011 Tue 3:30 PM 5:00 PM BCC: 102-104 4/19/2011 Tue 3:30 PM 5:00 PM BCC: 102-104

Upcoming AALG meetings:
1/27/2011 Thu 3:30 PM 5:00 PM BCC: $216^{* * *} 2 / 24 / 2011$ Thu 3:30 PM 5:00 PM BCC: 216 - changed from 2/17 3/10/2011 Thu 3:30 PM 5:00 PM BCC: 216 4/14/2011 Thu 3:30 PM 5:00 PM BCC: 216 5/19/2011 Thu 3:30 PM 5:00 PM BCC: 216

Upcoming Webinars - Haslam Building, Room 316 from 2:00 pm - 3:00 pm January 19, 2011 Undergraduate and Graduate Retention - two concepts, one outcome March 9, 2011 Yes, We Can: Improving Retention and Learning Outcomes for High-Risk Students through Curricular Reform at Trinity Washington University April 13, 2011 Beyond the ACT: Assessment of Non-Cognitive Factors Affecting the Success of Freshmen June 8, 2011 Priced out?: How Does Financial Aid Affect College Student's Retention and Transfer Choices? July 13, 2011 The comprehensive retention review: a step by step guide for evaluating the overall state of retention at your Institution September 14, 2011 Making Sense of First Generation Student Success: Is it Possible to Have too much Education?

## ASSOCIATE DEANS GROUP REPORT

## October 15, 2010 Meeting Minutes

Present: Craig Bleakney (staff); Tom George, Education, Health and Human Sciences;
RJ Hinde, Arts \& Sciences; Jan Lee, Nursing; Catherine Luther, Communication and Information; Sally McMillan (chair), Provost's Office; Masood Parang, Engineering; Bill Park, Agriculture and Natural Resources; Fred Pierce, Business Administration; Scott Wall, Architecture and Design.

The minutes from the 21 September, 2010 meeting were approved and will be sent to the Undergraduate Council.

The initial remarks were from McMillan in clarification of a question regarding summer funds returning to the department. Such funds for summer session classes do not necessarily need to be spent in the summer session and will carry over into the subsequent year. Hinde commented on agenda item 2a saying that some classes will fall below $90 \%$ enrollment capacity but still have lab sections which are full. Some high demand courses may not appear as high demand as most sections will be filled to capacity but one section will be left at low capacity levels. Additionally, a potential concern is creating a fluctuation of high demand courses. Meaning students might take a high demand course in the summer and it then becomes low demand in the academic year.

A clarification of the current model is this: The $\$ 8,000$ cap is lifted, but faculty members may still receive $1 / 27^{\text {th }}$ of their salary per credit hour. Lectures and GTA continue to receive a salary based on a negotiated rate. Summer classes already approved for the summer of 2011 can be revisited for salary negotiations.

Study abroad courses were discussed with strong support for having an incentive-sharing model between the departments and the Center for International Education.

Pierce suggested utilizing the Bursar's calendar instead of the $63^{\text {rd }}$ day enrollment figure. This would be more reflective of the actual funds collected by UT.

Parang expressed concern that students be able to utilize the summer session upon their return from a co-op.

Another concern was of faculty subjectively setting the attendance cap low, as instructors are able to regulate the amount of students allowed in their section.

The group discussed marketing summer school to students. Certain incentives might be offered as well, such as a discounted rate for early enrollment. In an effort to avoid inflating false enrollment, students might have to pay a small non-refundable deposit which would later go towards their enrollment fees.

The mandated development of a Bridge program with Pellissippi will be piloted this year. Students will be here at UT for the second summer session, spend a full year at Pellissippi, and then matriculate back into UT.

The general education taskforce has been formed and will continue with its mission. Revisiting Hinde's questions from last time:

A student with a double major, will he have to follow a double track?
-This student would have advisors in both majors but would have a primary advisor in a primary major. Currently students double majoring have a primary major listed. The student would only be "tracked" on the primary major.

How long will students remain in an exploratory track?
-Students will be allowed to remain 5 semesters, but 4 is encouraged.
If a course is only offered in the Spring, can it be considered a tracking course?
-If a spring-only course is necessary for tracking, it could possibly be identified as a tracking course for the year AFTER most students would actually take it.

For transfer students, which semester will they land in?
-This question will be answered next meeting. Hinde also requested data concerning this question.

Will the records be electronically checked?
-yes.

## November 19, 2010 Meeting Minutes

Present: Mary Albrecht, Chancellor's Office; Craig Bleakney (staff); Tom George, Education, Health and Human Sciences; RJ Hinde, Arts \& Sciences; Jan Lee, Nursing; Catherine Luther, Communication and Information; Sally McMillan (chair), Provost's Office; Masood Parang, Engineering; Bill Park, Agriculture and Natural Resources; Fred Pierce, Business Administration; Matthew Theriot, College of Social Work; Scott Wall, Architecture and Design.

The minutes from the 15 October, 2010 meeting were revised as per the suggestion of Hinde and will be sent to the Undergraduate Council. The revision comes in the fourth paragraph as: "..faculty members may still receive $1 / 27^{\text {th }}$ of their salary per credit hour."

The meeting opened with Albrecht presenting on the Top 25 plan and SACS. There are ongoing communications between undergraduate, research, graduate, and faculty. These groups have been developing proposals. These brainstorming sessions focus not only on academics but also on the entire undergraduate experience. All results from such sessions are collected and brought to the Vice-Provosts, Provost, and Chancellor who make the action decisions. Albrecht reviewed the framework of the plan. The first place resources will be channeled is into a database system of student information so that the University can move away from anecdotal data collected from small cohorts of students to comprehensive University-wide data. Resources needed for programs are being carefully considered and action plans are being prepared in incremental steps. This includes the assessment plan for student data.

The primary metrics align with the top- 25 goals. They are: quality of students, retention rate, and graduation rate. When these metrics are being discussed, the focus is on both implementing new programs as well as improving existing ones.

SACS is asking for resumes from all persons responsible for oversight of academic programs by January $12^{\text {th }}$. This includes associate and assistant deans, deans, department heads, and directors of undergraduate and graduate studies. This report is a mid-cycle review, and goals do not need to be shown as completed. The extent of what is needed is to review the initial report and give an update as to progress. The entire report will be submitted in March, so individual sections are asked to be turned in by February to allow time for corrections.

On the topic of summer school, Hinde noted that rising sophomores should be more highly encouraged to attend summer school in order to stay on track. This is a good time for repeating classes in which they scored a D or an F letter grade or finishing up a few remaining hours of general education requirements. Pierce mentioned that summer language classes are full of junior and senior students and thus these students should also be considered in summer school planning.

Wall inquired as to whether the Hope scholarship might be made available in the future for summer school. McMillan's reply was that this will not happen in the near future, but hopefully down the road as part of the ten funded semesters the Hope covers.

The model for funding instruction is still a work in progress. Departments will be given maximum latitude to use either the old or new funding model (but not both) this summer to be sure that they do not lose money on summer school. Faculty will be guaranteed the same pay that they received for teaching summer classes this past year and may actually be able to make a little bit more depending on the nature of the class they are teaching and the full department portfolio of classes. A complete list of summer courses was needed by December first. Lee suggested a cover memo suggesting the "why" behind what courses should be taught.

On the subject of Tracking, there is a concern that the system might hurt more than help students. It is then necessary to find where this potential hurt may arise from as well as how we can communicate more effectively to students. A project manager will be hired to identify potential problems and to make sure that they are addressed in a timely manner.

Bill Park questioned whether the UTracK concept needs to go through the undergrad council. It could also be valuable to let everyone see what is on the table and identify tracking courses across colleges and departments. Bill reflected that sometimes students stay in a major too long which is ill-suited for them. Great care will be taken to stay away from a system that allows students to dig their own holes.

Hinde mentioned a problematic scenario concerning students who are told that they are "off-track" after finals. There arises a problem with them being able to meet with their advisor before the new semester, and additionally most students would have registered for next semester classes by this point. Park would like to see an hour devoted to speaking about Transfer students and making sure they are not shut out of entry into majors. Lee would like to see us entertain two semesters instead of one for students to get back on track.

## CURRICULUM COMMITTEE REPORT

The Curriculum Committee met on January 18, 2011, at 2:00pm in the $4^{\text {th }}$ floor conference room of Andy Holt Tower.

Present: Monique Anderson, Chuck Collins (for R.J. Hinde), Ruth Darling, Jeff Fairbrother, Tom George, J ohn Koontz, Jon Levin, Catherine Luther, Norman Magden (for Suzanne Wright), John Mount, Cheryl Norris, Masood Parang, Bill Park, Bryan Patterson, Chris Pickart, Fred Pierce, Chris Pionke, Gary Ramsey, Lisi Schoenbach, Matthew Theriot (chair), Drew Webb.

Curricular proposals from the areas listed below were reviewed and approved.

A motion was passed to address the philosophy changes in a separate vote. After much discussion about the reduction in philosophy general education courses and its impact on other areas, the changes were "passed with prejudice" and with a recommendation that it be discussed and voted on separately from the whole package at the UG Council meeting on February $1^{\text {st }}$. The discussion raised the issue of how to accommodate curricular changes when a department wants to drop courses that affect other units. The impact on the availability of general education seats was also discussed.

- College of Agricultural Sciences and Natural Resources
- College of Architecture and Design
- College of Arts and Sciences
- College of Business Administration
- College of Communication and Information
- College of Education, Health and Human Sciences
- College of Engineering
- College of Nursing
- College of Social Work
- First-Year Studies Program


## * General education course

† Cross-listed course
$\diamond$ Add or drop of major, concentration, minor

# COLLEGE OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES 

## All changes effective Fall 2011

## PART I. COURSE CHANGES

DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS
(047) (AGEC) Agricultural Economics

DROP ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)
110 Opportunities in Agricultural, Food and Resource Economics (1)
*201 Economics of the Global Food and Fiber System (4)
212 The Agribusiness Firm (3)
310 Career Planning and Placement (1)
315 Agricultural and Environmental Law (3)
320 Microeconomics of Agriculture, Food and Resources (3)
324 Quantitative Methods (3)
342 Farm Business Management (3)
350 The Food and Agricultural Marketing System (3)
355 Agribusiness Marketing and Professional Selling (3)
356 Marketing Team Participation (1-2)
360 Rural Economic Development (3)
410 Senior Seminar (1)
412 Agricultural Finance (3)
420 International Agricultural Trade and Marketing (3)
430 Food and Agricultural Policy (3)
442 Agribusiness Management (3)
444 Economics of Precision Farming Technologies (3)
445 Economics of Biomass for Renewable Energy (3)
470 Policy Analysis for Environmental and Natural Resource Management (3)
472 Natural Resource Economics (3)
492 Off-Campus Internship (1-3)
493 Independent Study (1-3)

## (AREC) Agricultural and Resource Economics

## ADD ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

110 Opportunities in Agricultural, Food and Resource Economics (1) Overview of current issues and career opportunities for majors and non-majors.
*201 Economics of the Global Food and Fiber System (4) Introduction to microeconomic and macroeconomic principles and their application to the global food and fiber system. Specific topics include consumer and producer behavior, market equilibrium, monetary and fiscal policy, and international trade.
Satisfies General Education Requirement: (SS)
212 The Agribusiness Firm (3) Introduction to agribusiness firm characteristics and decision-making. Overview of economic principles and the basic functions of management - planning, organizing, controlling, and directing. Specific topics include firm structure, forecasting, marketing and selling, budgeting, break-even analysis, use of financial statements, capital investment, supervision, staffing, and evaluation.

310 Career Planning and Placement (1) Career planning, job markets in the agricultural industry, and techniques to obtain employment, including recruitment/placement services, resume construction, personal interviewing, and job-offer evaluation/analysis.

315 Agricultural and Environmental Law (3) Survey of legal topics related to agriculture and the natural environment. Topics include introduction to legal system, real property, civil liabilities, contracts, commercial transactions, environmental and natural resource regulation, farm and business organization, estate planning, and effective utilization of legal counsel.

320 Microeconomics of Agriculture, Food and Resources (3) Application of microeconomics to agriculture. Production, consumption, firm behavior, and efficiency in the food and fiber industries.
(RE) Prerequisite(s): 201 or Economics 201.
324 Quantitative Methods (3) Quantitative analytical tools used in economics and business. Simple and multiple linear regression techniques applied to economic data. Analysis of cross-section and time series data. Optimization techniques applied to economic and business decisions.
(RE) Prerequisite(s): 201 or Economics 201; Statistics 201.
(RE) Corequisite(s): 320.
342 Farm Business Management (3) Principles and procedures for determining most profitable business organizations and systems of operation; attention to traditional and nontraditional agricultural enterprises and businesses; nature of managerial processes; business records and their uses; budgeting; acquisition and management of capital, land, labor and machinery; farm business planning.
(RE) Prerequisite(s): 212 and Accounting 200.
Recommended Background: Introductory economics and microcomputer competence.
350 The Food and Agricultural Marketing System (3) Survey of U.S. food and fiber marketing system; marketing functions; industry structure; market channels; marketing options of farmers; basic analysis of marketing problems.
(RE) Prerequisite(s): 201 or Economics 201; 212.
355 Agribusiness Marketing and Professional Selling (3) Role of marketing in the agribusiness organization, planning marketing efforts, and the strategic selling process. Topics include identification of market opportunities, targeting, marketing mix, and personal selling in agribusiness.
(RE) Prerequisite(s): 201 or Economics 201.
356 Marketing Team Participation (1-2) Participation in the development of a total marketing plan for a product sold to or by farmers. Includes product identification; market research; and development of an action plan, including an extensive promotional plan, financial analysis, and evaluation. Requires preparation of final plan for presentation in written, oral, and visual formats. Plan presented in national competition during the National AgriMarketing Conference.
Repeatability: May be repeated. Maximum 6 hours.
Registration Permission: Consent of instructor.

410 Senior Seminar (1) Practice of critical thinking, ethical behavior, teamwork, and conflict resolution within the content of agribusiness decision-making. Analysis of contemporary issues in the field of agricultural economics.
Registration Restriction(s): Food \& Agricultural Business majors and Natural Resource and Environmental Economics majors.
412 Agricultural Finance (3) Macro-finance, financial objectives, acquisition of debt and equity funds, capital investments, capital allocation, debt repayment, credit analysis, borrower and lender loan application analysis, insurance strategies, computer applications, kinds and sources of agricultural credit, and financial intermediation.
(RE) Prerequisite(s): 212 and Accounting 200.
Recommended Background: Introductory economics and microcomputer competence.
420 International Agricultural Trade and Marketing (3) Introduction to real and monetary aspects of international trade effect on agricultural commodity flows; partial equilibrium analysis of international trade in agricultural products; institutional aspects of international marketing of agricultural products.
(RE) Prerequisite(s): 320.
430 Food and Agricultural Policy (3) Values, goals, and policy process. Economic rationale and effects of policy. Historical development and current characteristics of commodity, credit, food, and trade policy.
(RE) Prerequisite(s): 320.
442 Agribusiness Management (3) Advanced concepts in developing business and marketing plans and in applied management principles, such as inventory control and pricing techniques. Discussion of management issues including going international, employee supervision, management succession and guerilla marketing. Teamwork emphasized in managing an agribusiness firm through game simulation. Written and oral presentation required.
(RE) Prerequisite(s): 212 and Accounting 200.
Recommended Background: Intermediate microeconomics.
444 Economics of Precision Farming Technologies (3) Economic rationale for precision farming technologies. Topics include technology adoption, production economics, development of decision-making tools, and the use of spatial data for management of crop production systems.
(RE) Prerequisite(s): 201 or Economics 201; Agricultural and Natural Resources 290.
445 Economics of Biomass for Renewable Energy (3) Overview of the economics of renewable energy and the potential role for biomass. Assessment of the economic, environmental, and policy forces that are shaping the bioenergy industry. Exploration of methods for evaluating the economic feasibility of bioenergy feedstock production, logistics, and conversion.
(RE) Prerequisite(s): 201 or Economics 201.

460 Rural Economic Development (3) Use of economic principles in understanding rural economic development at community and regional levels, emphasizing the linkages between rural and urban communities, business location decisions, and how
geography shapes markets. Integrating historical and current information, students will explore efficiency and equity as driving forces behind public and private sector policy to encourage, manage and forecast domestic and international development.
(RE) Prerequisite: 320
470 Policy Analysis for Environmental and Natural Resource Management (3) Application of a policy analysis framework to conflicts and issues associated with natural resource use and related environmental quality impacts. Design of institutional changes to improve economic efficiency and equity, with emphasis on the potential applicability of market-type and incentive-based policy mechanisms.
(RE) Prerequisite(s): 201 or Economics 201.

472 Natural Resource Economics (3) Economic analysis of natural resource use and conservation with emphasis on land, water and other renewable resources. Principles for benefit-cost analyses of natural resource projects and policies. Methods for valuation of non-market impacts associated with natural resource use. Sustainability as an economic concept.
(RE) Prerequisite(s): 320.
492 Off-Campus Internship (1-3) Pre-approved supervised experience with firm or organization in the field. Grading Restriction: Satisfactory/No Credit Grading only.
Repeatability: May be repeated. Maximum 6 hours.
Registration Permission: Consent of instructor.
493 Independent Study (1-3) Directed individual or team research and report writing. Special courses in specific topics. Repeatability: May be repeated. Maximum 6 hours.
Registration Restriction(s): Minimum student level - junior.
Registration Permission: Consent of instructor.
Equivalency Table

| Current Courses <br> Agricultural Economics (AGEC) | Equivalent Courses Effective Fall 2011 <br> Agricultural and Resource Economics (AREC) |
| :---: | :---: |
| 110 | 110 |
| 201 | 201 |
| 212 | 212 |
| 310 | 310 |
| 315 | 315 |
| 320 | 320 |
| 324 | 324 |
| 342 | 342 |
| 350 | 350 |
| 355 | 355 |
| 356 | 356 |
| 360 | 460 |
| 410 | 410 |
| 412 | 412 |
| 420 | 420 |
| 430 | 430 |
| 442 | 442 |
| 444 | 444 |
| 445 | 445 |
| 470 | 470 |
| 472 | 472 |
| 492 | 492 |
| 493 | 493 |

## DEPARTMENT OF ANIMAL SCIENCE

## (113) (ANSC) Animal Science

## REVISE (RE) PREREQUISITE

## † 320 Reproductive Physiology and Lactation (3)

(RE) Prerequisite(s): 220 or Biochemistry and Cellular and Molecular Biology 230 or 440 or consent of instructor. Formerly: (RE) Prerequisite(s): 220 or Biochemistry and Cellular and Molecular Biology 230 or consent of instructor.

## $\dagger 361$ Beef Cattle Merchandising (3)

(RE) Prerequisite(s): 160; Agricultural and Resource Economics 201 or Economics 201.
Formerly: (RE) Prerequisite(s): 160; Agricultural Economics 201 or Economics 201.

## DEPARTMENT OF BIOSYSTEMS ENGINEERING AND SOIL SCIENCES <br> (194) (BSET) Biosystems Engineering Technology

DROP (DE) PREREQUISITE, ADD RECOMMENDED BACKGROUND
326 GIS/GPS Applications in Agriculture and Environmental Science (3)
Recommended Background: Intermediate computer skills in Microsoft Excel, Microsoft Access, and file management are highly recommended.
Formerly: (DE) Prerequisite(s): Agriculture and Natural Resources 290.

REVISE (RE) PREREQUISITE
452 Small Internal Combustion Engines (3)
(RE) Prerequisite(s): Mathematics 113 or 123 or 141 or 151.
Formerly: (RE) Prerequisite(s): Mathematics 113 or 123.

## 462 Agricultural Chemical Application Technology (3)

(RE) Prerequisite(s): Mathematics 123 or 141 or 151.
Formerly: (RE) Prerequisite(s): Mathematics 123 or 151.

## (196) (BSE) Biosystems Engineering

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REVISE (RE) PREREQUISITE
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*401 Biosystems Engineering Design I (2)
(RE) Prerequisite(s): Three of 411, 416, 431, 451.
Formerly: (RE) Prerequisite(s): 431 and 451.
REVISE (RE) COREQUISITE, ADD (RE) PREREQUISITE
404 Engineering Project Management (3)
(RE) Prerequisite(s): Three of 411, 416, 431, 451.
(RE) Corequisite(s): 401 and 444.
Formerly: (RE) Corequisite(s): 401.
ADD (RE) PREREQUISITE
444 Practicum (3)
(RE) Prerequisite(s): Three of 411, 416, 431, 451.

## (345) (ESS) Environmental and Soil Sciences

## DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

(341) (EPP) Entomology and Plant Pathology

DROP
405 Mycology (3)

## DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY

## (390) (FDST) Food Science and Technology

ADD
418 Honors: Food Chemistry (4) Reactions of water, proteins, lipids, carbohydrates, minerals, enzymes, vitamins, and additives in foods.
(RE) Prerequisite(s): Chemistry 110 or Chemistry 350.
428 Honors: Food Microbiology (3) Physical, chemical, and environmental factors moderating growth and survival of foodborne microorganisms. Pathogenic and spoilage microorganisms affecting quality of foods and their control.
(RE) Prerequisite(s): Microbiology 210 or Microbiology 310.

## DEPARTMENT OF FORESTRY, WILDLIFE AND FISHERIES

(396) (FORS) Forestry

## ADD

333 Wood Science for Non-Majors (2) A survey of the anatomy, properties, applications and impacts of wood materials. Includes training in wood identification. No prerequisite. Recommended for engineers, architects, materials scientists and anyone with an interest in this important natural resource.

335 Principles of Urban Forestry (3) Introductory course covers the history of the urban forest, benefits and costs of urban forests, tree biology, urban soil, urban forestry planning and management, urban forestry and public policy, and public works.

411 Principles of Wood Procurement and Sustainable Forestry (2) An introduction to wood procurement for forest products companies including different procurement methods, financial and resource assessment negotiation skills, and legal requirements.

## REVISE TITLE, REVISE DESCRIPTION, DROP (DE) PREREQUISITE

331 Wood Science for Forestry Majors (2) A survey of the anatomy, properties, applications and impacts of wood materials. Includes training in wood identification. Similar to FORS 333 but the schedule and expectations accommodate attendance in Fall block.
Formerly: Wood Properties and Uses (2) Wood as a biological material. Detailed examination of the woody cell wall. Influence of environmental and site conditions on wood formation. Physical and mechanical properties of wood and the relationship of the woody cell wall to these properties. Wood use in important commercial products. Day field trip may be required.
(DE) Prerequisite(s): Biology 112.
332 Forest Products Industry (1) An overview of the many steps in wood products manufacturing, from forest harvest to finished products. Includes visits to industrial facilities.
Formerly: Wood Identification (1) Cell structure and arrangement as a tool for species identification. Microscopic and hand lens identification of important commercial softwoods, hardwoods, and foreign woods. Laboratory procedures for making temporary slides for microscopic examination. Student use of reference collection of wood samples. Day field trip may be required.
(RE) Prerequisite(s): Forestry, Wildlife and Fisheries 212.

## ADD REGISTRATION RESTRICTION

## 215 Forest Ecology (3)

Registration Restriction(s): Forestry, Wildlife and Fisheries majors.

## (398) (FWF) Forestry, Wildlife and Fisheries

ADD
320 Human Dimensions of Natural Resources (3) Natural resource management as a social process focusing on how human, social and institutional factors interact and integrate with complex and dynamic biophysical systems. Influence on natural resource management of human institutions, values, attitudes and behaviors, and place.

## DROP

412 Human Dimensions of Natural Resources (3)

| Equivalency Table |  |
| :---: | :---: |
| Current Course | Equivalent Course Effective Fall 2011 |
| Forestry, Wildlife and Fisheries (FWF) | Forestry, Wildlife and Fisheries (FWF) |
| 412 | 320 |

## ADD REGISTRATION RESTRICTION

212 Dendrology and Silvics of North American Trees (3)
Registration Restriction(s): Forestry, Wildlife and Fisheries majors.
310 Wildland Fire Behavior and Management (1)
Registration Restriction(s): Forestry, Wildlife and Fisheries majors; minimum student level - junior.

## DEPARTMENT OF PLANT SCIENCES

## (791) (PLSC) Plant Sciences

## ADD

275 Organic and Sustainable Crop Production (3) Introduction to organic and sustainable production practices and principles for vegetable, fruit, field, and forage crops. Basics of soil fertility \& quality, tillage systems, crop rotation, cover crops, propagation, composting, season extension, and management of weeds, insects, \& diseases.
Contact Hour Distribution: 2 hour lecture; 1 2-hour lab.
415 Agroecology (3) Application of ecological concepts to management of horticultural and agronomic cropping systems. Examination of structure and function of agroecosystems, system-level interactions among agroecosystem components, and assessment of sustainability of cropping systems from environmental, economic, and social perspectives. Focus on organic and other alternative cropping systems.
Contact Hour Distribution: 2 hour lecture; 1 2-hour lab.
Credit Restriction: Students may not receive credit for both 415 and 515.

## ADD AND REQUEST VARIABLE TITLE PERMISSION

*491 International Study: History and Culture of International Gardens and Landscapes (3) International travel experience will provide opportunities to learn how historic European estates, gardens, and arboreta reflect the climate, topography, history, philosophical social structure, art and politics at the time of their creation. Course will focus on observation of local plant material, study of different garden and landscape design styles, and will foster an appreciation of international cultures.
Satisfies General Education Requirement: (WC)
Repeatability: May be repeated. Maximum 6 hours.

DROP
427 Management and Administration of Public Horticulture Institutions (2)

## †451 Plant Tissue Culture (3)

446 Horticultural Therapy (3)

## REVISE DESCRIPTION

430 Greenhouse Management (3) Principles of greenhouse operation and management for commercial crop production Greenhouse construction and operation, crop scheduling, and cost accounting. Environmental inputs and cultural practices as they affect plant physiological processes and influence plant growth and development. Weekend field trips may be required.
Formerly: Principles of greenhouse operation and management for commercial crop production. Greenhouse construction and operation, crop scheduling, and cost accounting. Environmental inputs and cultural practices as they affect plant physiological processes and influence plant growth and development.

## REVISE DESCRIPTION, REVISE CREDIT HOURS, REVISE CONTACT HOUR DISTRIBUTION

330 Plant Propagation (3) Physiology, methodology, and environmental requirements for sexual and asexual plant propagation. Hands-on exploration of lecture concepts via tissue culture, cuttings, layering, grafting, and other techniques.
Contact Hours Distribution: 3 hours lecture and 1 lab.
Formerly: (2) Physiology, methodology, and environmental requirements for propagation. Contact Hour Distribution: 2 hours and 1 lab.

## II. PROGRAM CHANGES

## REVISE COLLEGE TEXT (MINORS AND DEPARTMENTS)

- Agricultural leadership (Agricultural Leadership, Education and Communications Program).
- Animal science (Department of Animal Science).
- Biosystems engineering technology (Department of Biosystems Engineering and Soil Science).
- Entomology and plant pathology (Department of Entomology and Plant Pathology).
- Environmental and soil sciences (Department of Biosystems Engineering and Soil Science).
- Food and agricultural business (Department of Agricultural and Resource Economics).
- Food science (Department of Food Science and Technology).
- Food technology (Department of Food Science and Technology).
- Forestry (Department of Forestry, Wildlife and Fisheries).
- Natural resource and environmental economics (Department of Agricultural and Resource Economics).
- Plant sciences (Department of Plant Sciences).
- Wildlife and fisheries science (Department of Forestry, Wildlife and Fisheries).
- International agriculture and natural resources (Office of the Dean).


## REVISE COLLEGE TEXT (MAJORS, CONCENTRATIONS, AND DEPARTMENTS)

- Agricultural leadership, education and communications with concentrations in agricultural communications, agricultural education, agricultural extension education, agricultural leadership, and agricultural science (Agricultural Leadership, Education and Communications Program).
- Animal science with concentrations in animal industries, bioscience, pre-veterinary medicine, and pre-veterinary medicine 3+1 (Department of Animal Science).
- Biosystems Engineering with a pre-professional concentration (Department of Biosystems Engineering and Soil Science).
- Environmental and soil sciences with concentrations in agricultural systems technology, construction science technology, environmental science, land surveying, off-road vehicle technology, and soil science (Department of Biosystems Engineering and Soil Science).
- Food and agricultural business with a concentration in agricultural equipment systems management (Department of Agricultural and Resource Economics).
- Food science and technology with concentrations in pre-pharmacy, pre-professional, technology/business, and science (Department of Food Science and Technology).
- Forestry with concentrations in forest resources management and wildland recreation (Department of Forestry, Wildlife and Fisheries).
- Natural resource and environmental economics (Department of Agricultural and Resource Economics).
- Plant sciences with concentrations in bioenergy, biotechnology, horticulture science and production, landscape design and construction, organic production, public horticulture, and turfgrass science and management (Department of Plant Sciences).
- Wildlife and fisheries science with concentrations in wildlife and fisheries management, and wildlife health (Department of Forestry, Wildlife and Fisheries).


## AGRICULTURE AND NATURAL RESOURCES (INTERDEPARTMENTAL)

REVISE INTERNATIONAL AGRICULTURE AND NATURAL RESOURCES MINOR

## Select two courses:

AREC AGEG 420 - International Agricultural Trade and Marketing
EPP 201 - Impact of Insects and Plant Diseases on Human Societies *
FDST 150 - History and Culture of Food
FWF 420 - International Natural Resource Issues
ESS 120 - Soils and Civilizations *

ESS 220 - Waters and Civilizations *
PLSC 250 - World Food and Fiber Plant Production
ESS 334 - Soil Nutrient Management and Fertilizers or
ESS 442 - Soil Genesis and Classification

## DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS

## REVISE PROGRAM TEXT (JUST BEFORE FOOD AND AGRICULTURAL BUSINESS MAJOR REQUIREMENTS)

Students majoring in food and agricultural business are prepared for a wide variety of career opportunities. The focus of their studies is on the functioning of the agri-food sector in the global economic system and the economic principles for decision making by business managers, consumers, policymakers and others within that sector. Students complete a curriculum designed to provide them with a broad-based education and the specialized skills necessary for a successful career in the agri-food industry or with a related organization or public agency. The curriculum builds upon the university-wide general education requirements by adding a set of directed electives from within the College of Agricultural Sciences and Natural Resources, a set of core courses from within the College of Business Administration, and a set of required courses within the Department of Agricultural and Resource Economics. Students customize their program by selecting among upper-division electives within the department. General elective hours in the curriculum allow flexibility for students to pursue a minor within some area of technical agriculture or another field such as communications. Students have ample opportunity to develop strong microcomputer skills and gain practical real-world experiences through case study analyses, the NAMA marketing team, internships, and extracurricular activities.

Students graduating with a major in food and agricultural business have many career options. Many graduates take positions in management or marketing with businesses involved in the farm input supply sector. This would include large multinational corporations that manufacture inputs such as machinery, chemicals, and feed, as well as local retailers of such items. Other graduates manage operations involved in the production of agricultural commodities or the processing of food products. Graduates also find career opportunities with food distribution and retailing companies serving as managers, marketing representatives, or in areas of customer service and public relations. Graduates are employed in financial institutions, insurance agencies, or real estate companies. Many industry organizations and government agencies also have employment opportunities for our graduates. It is not uncommon for our graduates to take positions with businesses that are outside the agri-food industry. Graduates also find themselves well prepared for graduate study in agricultural and resource economics or agribusiness management, as well as for professional programs such as law.

REVISE FOOD AND AGRICULTURAL BUSINESS MAJOR
First Year
Hours Credit
AREC AGEC 110 ..... 1
NUTR 100* ..... 3
${ }^{1}$ Biological Science Elective* ..... 4
${ }^{2}$ Cultures and Civilizations Electives* ..... 6
ENGL 101*, ENGL 102* ..... 6
MATH 123*, MATH 125* ..... 6
PSYC 110* or POLS 102* or SOCI 120* ..... 3
Second Year
ACCT 2003
AREC AGEG 212 ..... 3
AREC AGEG 201* ..... 4
FDST 101 or FDST 150 ..... 3
AGNR 290 ..... 3
PHHL 243* ${ }^{2}$ Arts and Humanities Elective* ..... 3
${ }^{3}$ Physical Sciences Electives* ..... 8
STAT 201* ..... 3
Third Year
AREC AGEC 310, AREC AGEC 320, AREC AGEC 324, AREC AGEC 342, AREC AGEC 350, AREC AGEC 412 ..... 16
ALEC 440* or ENGL 360* ..... 3
${ }^{4}$ Nondepartmental CASNR Electives ..... 6
CMST 210* or CMST 240* ..... 3
${ }^{2}$ Arts and Humanities Electives ..... 3
Fourth Year
AREC AGEG 410, AREC AGEG 442 ..... 4
${ }^{5}$ Agricultural and Resource Economics Electives ..... 12
Any 300-level Economics course ..... 3
${ }^{4}$ Nondepartmental CASNR Electives ..... 3
Free Electives ..... 8 ..... 8

## Footnotes

${ }^{5}$ A maximum of 3 credit hours can be used from each of the following courses: AREC AGEC 356, AREC AGEC 492 and AREC AGEC 493.

REVISE FOOD AND AGRICULTURAL BUSINESS MAJOR—AGR EQUIPMENT SYSTEMS MGT CONCENTRATION

| First Year | Hours Credit |
| :--- | ---: |
| AREC AGEG 110 | 1 |
| BIOL 111*, BIOL 112* | 8 |
| ${ }^{1}$ Cultures and Civilizations* | 6 |
| ENGL 101*, ENGL 102* | 6 |
| MATH 123*, MATH 125* | 6 |
| AGNR 290 | 3 |
| Second Year |  |
| ACCT 200 | 3 |
| AREC AGEC 212 | 3 |
| AREC AGEC 201* | 3 |
| BSET 202 | 4 |
| CHEM 120* | 3 |
| PHIL 243* ${ }^{*}$ Arts and Humanities Elective* | 4 |
| PHYS 161* | 3 |
| ESS 210 | 3 |
| STAT 201* | 4 |
| Third Year | 3 |
| AREC AGEG 310, AREC AGEG 320, AREC AGEG 324, AREC AGEG |  |
| 342, AREC AGEG 350, AREC AGEG 412 | 3 |
| ESS 324 | 16 |
| BSET 326 | 3 |
| ALEC 440* or ENGL 360* | 3 |
| ${ }^{1}$ Arts and Humanities Elective* | 3 |
| CMST 210* or CMST 240* | 3 |
| PSYC 110* or POLS 102* or SOCI 120* | 3 |
| Fourth Year | 3 |
| AREC AGEC 410, AREC AGEC 442 | 3 |
| ${ }^{2}$ Agricultural and Resource Economics Electives | 3 |
| BSET 432, BSET 452, BSET 462 | 3 |
| Any 300-400 level BSET Elective | 3 |
| Any 300-level Economics course | 3 |
|  | 3 |

## Footnotes

${ }^{2}$ A maximum of three credit hours can be used from each of the following courses: AREC AGEG 356, AREC AGEG 492 and AREC AGEG 493.

## REVISE FOOD AND AGRICULTURAL BUSINESS MINOR

## Minor Requirements

The minor consists of 22 hours.

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Complete:
    ACCT 200 - Foundations of Accounting
    AREC AGEG 201-Economics of the Global Food and Fiber System
    AREC AGEG 212 - The Agribusiness Firm
    AREC AGEG 342-Farm Business Management
    AREC AGEC 350-The Food and Agricultural Marketing System
    AREC AGEC 412 - Agricultural Finance
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Select 3 hours:
any Agricultural and Resource Economics course
REVISE NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS MAJOR
First Year Hours Credit
AREC AGEC 110 ..... 1
FWF 250*3
${ }^{1}$ Biological Science Elective* ..... 4
ESS 120* and ESS 220* ..... 6
ENGL 101*, ENGL 102* ..... 6
MATH 123*, MATH 125* ..... 6
PSYC 110* or POLS 102* or SOCI 120* ..... 3
Second Year
ACCT 200 ..... 3
AREC AGEG 212 ..... 3
AREC AGEG 201* ..... 4
${ }^{2}$ Arts and Humanities Elective* ..... 3
AGNR 290 ..... 3
PHIL 245* ..... 3
CMST 210* or CMST 240* ..... 3
${ }^{3}$ Physical Sciences Elective* ..... 4
ESS 210 ..... 4
STAT 201* ..... 3Third YearAREC AGEC 310, AREC AGEC 315, AREC AGEC 320, ARECAGEC 342 or AREC AGEC 350, AREC AGEC 43013
ECON 362 ..... 3
BSET 326 ..... 3
${ }^{4}$ Nondepartmental CASNR Electives ..... 6
GMST 210* or GMST 240* ..... 3
PHIL 346* ..... 3
AREC AGEG 324 ..... 3
Fourth Year
AREC AGEG 410, AREC AGEG 470, AREC AGEG 472 ..... 7
ECON 463 ..... 3
${ }^{5}$ Agricultural and Resource Economics Electives ..... 6
ALEC 440* or ENGL 360* ..... 3
ECON 361 or ECON 371, or GEOG 340 or GEOG 345 or GEOG 436, or ..... 3
SOCI 360
SOCI 360
3
8
3
8
Arts and Humanities Elective
Arts and Humanities Elective ..... 85

Total 120
Footnotes
${ }^{5}$ A maximum of three credit hours can be used from each of the following courses: AREC AGEG 356, AREC AGEG 492 and AREC AGEG 493.

## ADD NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS MINOR

## Minor Requirements

The minor consists of 22 credit hours.

## Complete:

- AREC 201 - Economics of the Global Food and Fiber System
- AREC 315 - Agricultural and Environmental Law
- AREC 320 - Microeconomics of Agriculture, Food, and Resources
- AREC 430 - Food and Agricultural Policy
- AREC 470 - Policy Analysis for Environmental and Natural Resource Management
- AREC 472 - Natural Resource Economics

Select one course:

- Any 300- or 400-level AREC elective


## AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATIONS PROGRAM

REVISE AGRICULTURAL LEADERSHIP, EDU \& COMMUNICATIONS MAJOR—AGRICULTURAL COMMUNICATIONS CONC
First Year
AGNR 100 or ALEC 101
Hours Credit
AGNR 290
Electives 8
CCI 150
3
ENGL 101*, ENGL 102* 6
JREM 175 3
MATH 113* and Quantitative Reasoning Course* 6
Plant Sciences Elective (any PLSC course) 3

## Second Year <br> ACCT 200 3

ADVT 250 3
${ }^{2}$ AREC AGEG 201* or ECON 201* 4
ALEC 211, ALEC 240* 6
${ }^{1}$ BIOL 101*-BIOL 102* or BIOL 130*-BIOL 140* (w/ lab) 8
AREC AGEG 212 3
JREM 200 3
Food Science and Technology Elective (any FDST course) 3

## Third Year

ALEC 340, ALEC 445 4
${ }^{3}$ Art and Humanities Elective* 3
${ }^{3}$ Cultures and Civilizations Elective* 3
Forestry, Wildlife and Fisheries Elective (any FORS, FWF, or 3
$\qquad$
JREM 400 3
JREM 412 or JREM 451 or JREM 4563
Agricultural and Resource Economics Electives (any AREC 6
AGEG courses)
Plant Sciences Elective (any PLSC course) 3
Fourth Year
ALEC 440*, ALEC 441, ALEC 446 12
${ }^{3}$ Art and Humanities Elective* 3
${ }^{4}$ Elective 3
ESS 120* or ESS 220* 3
JREM 466
${ }^{2,3}$ Social Science Elective* 3

## Total 121

Footnotes
${ }^{1}$ Physical Science Electives-two courses (8 hours) from chemistry, physics, geology, GEOG 131-GEOG 132, ESS 210. CHEM 130 is a prerequisite/corequisite to BIOL 140. Therefore, students who choose BIOL 130-140 should take CHEM $120-130$ for their physical science electives. CHEM 130 is a
prerequisite/corequisite to BIOL 140, therefore a student selects CHEM 120-
GHEM 130 and BIOL 130 -BIOL 140 ; otherwise the student must elect CHEM 100 -CHEM 110 and BIOL 101 -BIOL 102 .
${ }^{2}$ AREC AGEG 201 (4) or ECON 201 (4) satisfies the University General Education-
-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credits, it will satisfy the major requirement but will not satisfy the General Education--Social Sciences requirement. In these cases, the student should take two courses from the Social Science list.


Second Year
ALEC 201, ALEC 240*
Hours Credit

ARSC 220 :
ANSC 220 3
${ }^{1}$ CHEM 100**110* or CHEM 120*-130* Physical Science Electives 8
${ }^{2}$ AREC AGEC * or ECON 201* 4

## ESS 210 <br> 4

## PLSC 115 <br> 3

PSYC 110* ..... 3
Third Year
ALEC 345 ..... 3
AREC AGEG 342 ..... 3
ANSC 330 ..... 3
EPP 313 or EPP 321 ..... 3
ESS 334 ..... 3
FDST 269 ..... 2
FWF 250 ..... 3
PLSC 250 ..... 3
${ }^{3,4}$ Cultures and Civilizations Elective* ..... 3
${ }^{3,4}$ Art and Humanities Elective* ..... 3

## Footnotes

${ }^{1}$ Physical Science Electives-two courses (8 hours) from chemistry, physics,
geology, GEOG 131-GEOG 132, ESS 210. CHEM 130 is a prerequisite/corequisite to BIOL 140. Therefore, students who choose BIOL 130-140 should take CHEM 120-130 for their physical science electives. GHEM 130-is a prerequisite/corequisite to BIOL 140, therefore a student selects CHEM 120-CHEM 130 and BIOL 130 BIOL 140 ; otherwise the student must elect CHEM 100-CHEM 110-and BIOL 101 BIOL 102.
${ }^{2}$ AREC AGEG 201 (4) or ECON 201 (4) satisfies the University General Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credits, it will satisfy the major requirement but will not satisfy the General Education--Social Sciences requirement. In these cases, the
student should take two courses from the Social Science list.

REVISE AGRICULTURAL LEADERSHIP, EDU \& COMMUNICATIONS MAJOR—AGRICULTURAL LEADERSHIP CONC

| First Year | Hours Credit |
| :---: | :---: |
| AGNR 100 or ALEC 101 | 1 |
| ALEC 102, ALEC 103 | 6 |
| Agricultural and Resource Economics Elective (any AREC AGEG course) | 3 |
| AGNR 290 | 3 |
| ${ }^{1}$ BIOL 101*-BIOL 102* or BIOL 111*-BIOL 112* or BIOL 130*-BIOL 140* | 8 |
| ENGL 101*, ENGL 102* | 6 |
| MATH 113* and Quantitative Reasoning Course* | 6 |
| Second Year |  |
| ALEC 202, ALEC 211, ALEC 240* | 9 |
| Animal Science Elective (any ANSC course) | 3 |
| ${ }^{1}$-CHEM 100-*110* or CHEM 120*-130* Physical Science Electives | 8 |
| ${ }^{2}$ AREC AGEC 201* or ECON 201* | 4 |
| Environmental and Soil Science Elective (any ESS course) | 4 |
| Food Science and Technology Elective (any FDST course) | 3 |
| Third Year |  |
| ALEC 303, ALEC 304, ALEC 440* | 9 |
| EPP 313 or EPP 321 | 3 |
| ${ }^{3}$ Cultures and Civilizations Elective* | 3 |
| ${ }^{3}$ Arts and Humanities Elective* | 3 |
| Plant Sciences Elective (any PLSC course) | 3 |
| PHIL 245* PHIL 244* or PHIL 252* | 3 |
| ANSC 495 | 3 |
| Footnotes |  |
| ${ }^{1}$ Physical Science Electives-two courses (8 hours) from chemistry, physics, geology, |  |
| GEOG 131-GEOG 132, ESS 210. CHEM 130 is a prerequisite/corequisite to BIOL 140. |  |
| Therefore, students who choose BIOL 130-140 should take CHEM 120-130 for their physical science electives. CHEM 130 is a prerequisite/corequisite to BIOL 140, |  |
| therefore a student selects CHEM 120-CHEM 130 and BIOL 130-BIOL 140 ; otherwise the student must elect CHEM 100-CHEM 110 and BIOL 101 - BIOL 102. |  |
| ${ }^{2}$ AREC AGEC 201 (4) or ECON 201 (4) satisfies the University General Education- |  |
| Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credits, it will satisfy the major requirement, but will not satisfy the General Education-Social Science requirement. In these cases, the student should take two courses from the approved General Education-Social Sciences list. |  |

REVISE AGRICULTURAL LEADERSHIP, EDU \& COMMUNICATIONS MAJOR—AGRICULTURAL SCIENCE CONC
First Year
Hours Credit
AGNR 100, AGNR $290 \quad 4$
ANSC 160 3
${ }^{1}$ CHEM 100**110* or CHEM 120*-130* Physical Science Electives 8
ENGL 101*, ENGL 102* 6
MATH 113* and Quantitative Reasoning Course* 6
PLSC 115
3

## Second Year

ALEC 211, ALEC 240* 6
AREC AGEC 2123
FDST 1013
${ }^{1}$ BIOL 101*-BIOL 102* or BIOL 130*-BIOL 140* 8
ESS 210 4
PLSC 250 3
${ }^{2}$ AREC AGEG 201* or ECON 201* 4

## Third Year

AREC AGEG 342 3
EPP 313 or EPP 3213
${ }^{3,4}$ Cultures and Civilizations Elective* 3
${ }^{3,4}$ Arts and Humanities Elective* 3
PLSC 330 or PLSC 430 2-3
${ }^{5}$ Minor 15
Footnotes
${ }^{1}$ Physical Science Electives-two courses (8 hours) from chemistry, physics, geology, GEOG 131-GEOG 132, ESS 210. CHEM 130 is a prerequisite/corequisite to BIOL 140. Therefore, students who choose BIOL 130-140 should take CHEM 120-130 for their physical science electives. CHEM 130 is a prerequisite/corequisite to BIOL 140, therefore a student selects CHEM 120 -CHEM 130 and BIOL 130 -BIOL 140 ; otherwise the student must elect CHEM 100-CHEM 110 and BIOL 101 -BIOL 102.
${ }^{2}$ AREC AGEC 201 (4) or ECON 201 (4) satisfies the University General Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credits, it will satisfy the major requirement but will not satisfy the General Education--Social Sciences requirement. In these cases, the student should take two courses from the Social Sciences list.
${ }^{5}$ Students should select one of the minors offered by the College of Agricultural Sciences and Natural Resources: animal science, biosystems engineering technology, entomology and plant pathology, environmental and soil sciences, food and agricultural business, agricultural leadership, food science, food technology, forestry, international agriculture and natural resources, natural resource and environmental economics, plant sciences, wildlife and fisheries science, or one of the minors in the College of Communication and Information (see listing in this catalog), or submit an individualized plan of study before the third year, for approval by the advisor, department head, and the Dean's Office. If the minor is less than 24 hours, the excess hours will become free electives.

## DEPARTMENT OF ANIMAL SCIENCE

REVISE ANIMAL SCIENCE MAJOR—ANIMAL INDUSTRIES CONCENTRATION

| Second Year | Hours Credit |
| :--- | ---: |
| ANSC 220, ANSC 280* | 6 |
| AGNR 290 | 3 |
| ESS 210 | 4 |
| AREC AGEG 201* | 4 |
| ${ }^{1}$ Arts and Humanities Electives* | 6 |
| ${ }^{2}$ Business Administration minor or ${ }^{3}$ Agricultural Economics and Business | 3 |
| minor or ${ }^{4}$ Communication and Information minor | 3 |
| ${ }^{1}$ Social Science Elective* | 3 |
| Free Electives | 3 |

## Footnotes

${ }^{2}$ Requirements for the business administration minor are ACCT 200 (3); ECON 201 (4); STAT 201 (3); MGT BUAD 201 (3 4); FINC 300 (3); MARK 300 (3); MGT 300 (3). Total 22 23 hours.
${ }^{23}$ Requirements for the agricultural economics and business minor are ECON 201 (4);
ACCT 200 (3); AREC AGEC 212, AREC AGEC 342, AREC AGEC 350, AREC AGEC 412
(12); Agricultural and Resource Economics elective (3). Total 22 hours.
${ }^{5}$ ANSC 385, ANSC 420, Biochemistry and Cellular and Molecular Biology (any course above 200); Ecology and Evolutionary Biology (any course above 200); EPP 201, EPP 313, EPP 321, EPP 325, EPP 405, EPP 410, EPP 451; ESS 454; KNS 480; FDST 241, FDST 410, FDST 420, FDST 429, FDST 445; FORS 214, FORS 215, FORS 331, FORS 332, FORS 414; FWF 212, FWF 250, FWF 317, FWF 320 412; Microbiology (any course above 200); NUTR 100, NUTR 302, NUTR 310, NUTR 313, NUTR 314, NUTR 412, NUTR 415, NUTR 416, NUTR 420; PLSC 210, PLSC 220, PLSC 330, PLSC 341, PLSC 343, PLSC 348, PLSC 452, PLSC 370, PLSC 410, PLSC 421, PLSG 427, PLSC 434, PLSC 435, PLSC 442, PLSC 446, PLSC 450; PSYC 370, PSYC 450, PSYC 459, PSYC 461; WFS 301 , WFS 340, WFS 350, WFS 440, WFS 442, WFS 443, WFS 444, WFS 445, WFS 450, WFS 455, WFS 456.
Second YearHours Credit
ANSC 220, ANSC 280* ..... 6
AGNR 290 ..... 3
CMST 210* or CMST 240* or ANSC 360* ..... 3
${ }^{1}$ Arts and Humanities Elective* ..... 3
AREC AGEC 201* ..... 4
${ }^{2}$ Physical Science and Mathematics Restricted Elective ..... 8
${ }^{3}$ Biological Science Restricted Elective ..... 3
Footnotes${ }^{3}$ ANSC 385, ANSC 420, ANSC 430; Biochemistry and Cellular and Molecular Biology (anycourse above 200); Ecology and Evolutionary Biology (any course above 200); EPP 201,EPP 313, EPP 321, EPP 325, EPP 405, EPP 410, EPP 451; ESS 454; KNS 480; FDST241, FDST 410, FDST 420, FDST 429, FDST 445; FORS 214, FORS 215, FORS 331,FORS 332, FORS 414; FWF 212, FWF 250, FWF 317, FWF 320 412; Microbiology (anycourse above 200); NUTR 100, NUTR 302, NUTR 310, NUTR 313, NUTR 314, NUTR 412,NUTR 415, NUTR 416, NUTR 420; PLSC 210, PLSC 220, PLSC 330, PLSC 341, PLSC343, PLSC 348, PLSC 452, PLSC 370, PLSC 410, PLSC 421, PLSC 427, PLSC 434,PLSC 435, PLSC 442, PLSG 446, PLSC 450; PSYC 370, PSYC 450, PSYC 459, PSYC461; WFS 301, WFS 340, WFS 350, WFS 440, WFS 442, WFS 443, WFS 444, WFS 445,WFS 450, WFS 455, WFS 456.
${ }^{4}$ ACCT 200; AREC AGEC 212, AREC AGEC 320 and above; MGT BUAD 201; FINC 300; Economics (any course above 201 211); MGT 300; MARK 300, ANSC 385.

## REVISE ANIMAL SCIENCE MAJOR—PRE-VETERINARY MEDICINE CONCENTRATION

| Second Year | Hours Credit |
| :---: | :---: |
| ANSC 220, ANSC 280* | 6 |
| AGNR 290 | 3 |
| CMST 210* or CMST 240* or ANSC 360* | 3 |
| ${ }^{1}$ Arts and Humanities Elective* | 3 |
| AREC AGEG 201* |  |
| CHEM 350, CHEM 360, and CHEM 369 | 8 |
| BIOL 240 |  |
| Footnotes |  |
| ${ }^{2}$ ANSC 385, ANSC 420, ANSC 430; Biochemistry and Cellular and Molecular Biology (any |  |
| course above 200); Ecology and Evolutionary Biology (any course above 200); EPP 201, |  |
| EPP 313, EPP 321, EPP 325, EPP 405, EPP 410, EPP 451; ESS 454; KNS 480; FDST 241, |  |
| FDST 410, FDST 420, FDST 429, FDST 445; FORS 214, FORS 215, FORS 331, FORS |  |
| 332, FORS 414; FWF 212, FWF 250, FWF 317, FWF 320 412; Microbiology (any course above 200); NUTR 100, NUTR 302, NUTR 310, NUTR 313, NUTR 314, NUTR 412, NUTR |  |
| 415, NUTR 416, NUTR 420; PLSC 210, PLSC 220, PLSC 330, PLSC 341, PLSC 343, PLSC |  |
| 348, PLSC 452, PLSC 370, PLSC 410, PLSC 421, PLSC 427, PLSC 434, PLSC 435, PLSC |  |
| 442, PLSC 446, PLSC 450; PSYC 370, PSYC 450, PSYC 459, PSYC 461; WFS 301, WFS |  |
| 340, WFS 350, WFS 440, WFS 442, WFS 443, WFS 444, WFS 445, WFS 450, WFS 455, |  |
| WFS 456. |  |
| ${ }^{3}$ ACCT 200; AREC AGEG 212, AREC AGEG 320 and above; MGT BUAD 201; FINC 300; |  |
| Economics (any course above 201 211); MGT 300; MARK 300. |  |

REVISE ANIMAL SCIENCE MAJOR—PRE-VETERINARY MEDICINE 3+1 CONCENTRATION
Introductory Text (4 ${ }^{\text {th }}$ bullet)

- In addition to all the required pre-veterinary medical courses, the following (or approved equivalents) must be completed before entering the College of Veterinary Medicine.

O MATH 125 or MATH 141 or MATH 151 plus any QR
O ANSC 160-3 hours
O ANSC 220-3 hours;
O ANSC 320-3 hours
O ANSC 330-3 hours
0 ANSC 340-3 hours
O ANSC 380-3 hours
0 AGNR 290-3 hours
O AREC AGEC 201-4 hours
o CMST 210 or CMST 240 or ANSC $360-3$ hours
0 NOTE: AREC AGEC 201 and CMST 210 or CMST 240 will be accepted by the CVM as meeting requirements in Humanities/Social Science category. The remainder must be a Social Science Elective, Arts and Humanities electives ( 6 hours) and Cultures and Civilizations electives (6 hours); one of which must be writing intensive.

## Third Year

ANSC 320, ANSC 330, ANSC 340, ANSC 380, ANSC 395
BCMB 401 4
${ }^{1}$ Arts and Humanities Elective* 6
AREC AGEG 201* 4
${ }^{1}$ Cultures and Civilizations Elective* 6
${ }^{1}$ Social Science Elective* ${ }^{*}$

## DEPARTMENT OF BIOSYSTEMS ENGINEERING AND SOIL SCIENCES

## REVISE DEPARTMENT TEXT

The Department of Biosystems Engineering and Soil Science offers two undergraduate degree programs - Bachelor of Science in Biosystems Engineering and Bachelor of Science in Environmental and Soil Sciences. Biosystems engineering is a four-year, ABET-accredited engineering program emphasizing engineering applications to biological systems. Environmental and soil sciences is a strong science-based program for students interested in environmental science, soil science, or engineering technology. Engineering technology concentrations include agricultural systems technology, construction science technology, land surveying, and off-road vehicle technology. Students in the land surveying concentration are eligible to sit for the Tennessee Professional Land Surveyor-In-Training exam (see http://biosystems.utk.edu/surveying for more details). Minors in either environmental and soil sciences or in biosystems engineering technology are also available. More detailed descriptions of each program are included with the curricular material that follows.

In order to provide students with the best advice concerning course selection, general academic success, and career choices, the programs within the Department of Biosystems Engineering and Soil Science require that all undergraduate students meet with their academic advisors every semester before registering for classes.

## ADD PROGRAM TEXT (JUST BEFORE BIOSYSTEMS ENGINEERING MAJOR REQUIREMENTS)

In order to provide students with the best advice concerning course selection, general academic success, and career choices, the programs within the Department of Biosystems Engineering and Soil Science require that all undergraduate students meet with their academic advisors every semester before registering for classes.

## ADD PROGRAM TEXT (JUST BEFORE BIOSYSTEMS ENGINEERING MAJOR-PRE-PROFESS CONC REQUIREMENTS)

In order to provide students with the best advice concerning course selection, general academic success, and career choices, the programs within the Department of Biosystems Engineering and Soil Science require that all undergraduate students meet with their academic advisors every semester before registering for classes.

REVISE BIOSYSTEMS ENGINEERING MAJOR

| Third Year | Hours Credit |
| :--- | ---: |
| BSE 411, BSE 416, BSE 431, BSE 451 | 13 |
| STAT 251 | 3 |
| ECE 301 | 3 |
| MATH 200 | 1 |
| ${ }^{4}$ Technical Elective | 3 |
| ENGL 360* | 3 |
| AE 341 | 3 |
| PHIL 241* or PHIL 245* PHIL 244* | 3 |
|  |  |
| Fourth Year | 14 |
| BSE 401*, BSE 402, BSE 404, BSE 444 | 3 |
| ${ }^{4}$ Technical Elective | 4 |
| AREC AGEC 201* or ECON 201* | 3 |
| ${ }^{3}$ Social Sciences Elective* | 3 |
| ${ }^{3}$ Arts and Humanities Elective* | 3 |

Footnotes
Note that some electives have required prerequisites. See individual course descriptions forspecific information. BSET 412 , BSET 414 , BSET 432 , BSET 434 , BSET 452 , BSET 462 ,BSET 474 ; CE 485 , CE 486 ,CE 490 ; CHEM 230 , CHEM 310 , CHEM 350 , CHEM 360 ; ECE206 ; ESS 334 , ESS 434 , ESS 442 , ESS 444 , ESS 454 ; GEOG 410 , GEOG 411 ; GEOL485 ; IE 304 ; MATH 403 , MATH 405 , MATH 411 , MATH 431 ; ME 363 , ME 365 , ME 366 , ME391 , ME 405 , ME 451 , ME 466 ; PHYS 232.
REVISE BIOSYSTEMS ENGINEERING MAJOR—PRE-PROFESSIONAL CONCENTRATIONThird YearHours Credit
BSE 411, BSE 431, BSE 451 ..... 10
STAT 251 ..... 3
ECE 301 ..... 3
MATH 200 ..... 1
AE 341 ..... 3
ENGL 360* ..... 3
CHEM 360, CHEM 369 ..... 5
PHIL 241* or PHIL 245* PHIL 244* ..... 3
Fourth Year
BSE 401*, BSE 402, BSE 404, BSE 444 ..... 14
AREC AGEC 201* or ECON 201* ..... 4
${ }^{3}$ Social Sciences Elective* ..... 3
${ }^{3}$ Arts and Humanities Elective* ..... 3
${ }^{3}$ Cultures and Civilizations Electives* ..... 6
REVISE ENVIRONMENTAL AND SOIL SCIENCES MAJOR—AGR SYSTEMS TECHNOLOGY CONCENTRATION
Second Year Hours Credit
ACCT 200 ..... 3
AREC AGEG 212 ..... 3
AGNR 290 ..... 3
${ }^{1}$ Arts and Humanities Elective* ..... 3
${ }^{1}$ Cultures and Civilizations Elective* ..... 3
AREC AGEC 201* ..... 4
ESS 210 ..... 4
CMST 210* or CMST 240* ..... 3
PHYS 221* ..... 4
STAT 201* ..... 3
Third Year
AREC AGEG 350 or AREC AGEG 355 ..... 3
BSET 326, BSET 412 ..... 6
ENGL 295* or ENGL 360* ..... 3
${ }^{1}$ Cultures and Civilizations Elective* ..... 3
EPP 313, EPP 321 ..... 6
ESS 324, ESS 334 ..... 6
PLSC 457 ..... 3
Fourth Year
${ }^{1}$ Arts and Humanities Elective* ..... 3
BSET 414, BSET 432, BSET 434, BSET 462, BSET 474 ..... 15
AREC AGEG 412 ..... 3
${ }^{2}$ Technical Electives ..... 9

[^0]ADD ENVIRONMENTAL AND SOIL SCIENCES MAJOR—CONSTRUCTION SCIENCE CONCENTRATION

REVISE ENVIRONMENTAL AND SOIL SCIENCES MAJOR—CONSTRUCTION SCIENCE CONCENTRATION

| Third Year | Hours $\mathbf{C r}$ |
| :--- | ---: |
| BSET 325, 326, 412, 414 | 912 |
| ${ }^{3}$ MGT BUAD 201 | 34 |
| BULW 301 | 23 |
| ${ }^{2}$ Cultures and Civilizations Elective* | 3 |
| CE 442 | 3 |
| ESS 324 | 3 |
| ${ }^{3}$ MGT 300 | 3 |
| ${ }^{4}$ Technical Elective | 3 |
|  |  |
| Fourth Year | 3 |
| ${ }^{2}$ Arts and Humanities Elective* | 3 |
| BSE 404 | 3 |
| BSET 411, 432,-434 | 47 |
| CE 543 | 3 |
| ${ }^{3}$ FINC 300 | 3 |
| ${ }^{3}$ MARK 300 | 3 |
| ${ }^{4}$ Technical Electives | 96 |

## Footnotes

${ }^{4}$ Note that some electives have required prerequisites. See individual course descriptions in the catalog for specific information. BSET 202, 326, 434, 474; Environmental and Soil Sciences 334,
444. Choose from the following list or from alternatives after consultation with advisor. Note that some electives have required prerequisites. See individual course descriptions for specific information. BSET 202, BSET 474; ESS 334, ESS 444.

REVISE ENVIRONMENTAL AND SOIL SCIENCES MAJOR—ENVIRONMENTAL SCIENCE CONCENTRATION
Second Year Hours Credit
Arts and Humanities Electives*
Arts and Humanities Electives*63AGNR 2903
BIOL 250 ..... 4
AREC AGEC 201* or ECON 201* ..... 4
ESS 210 ..... 4
GEOL 101* ..... 4
PHIL 245* ..... 3
${ }^{1}$ Cultures and Civilizations Elective* ..... 3
PHYS 221* ..... 4Third Year
${ }^{2}$ Gommunicating Through Writing Elective* ..... 3
3463
BSET 3263-4
3
PLSC 461 or STAT 201* ..... 10CHEM 350 or CHEM 110
${ }^{1}$ Social Sciences Elective* ..... 3
${ }^{23}$ Technical Electives ..... 6
Fourth Year
AREC AGEC 445 or AREC AGEC 470 or AREC AGEC 472 or ECON 362 ..... 3
EEB 404 or EEB 470 ..... 3
BSET 412 or BSET 474 ..... 3
ESS 434, ESS 444, ESS 462 ..... 9
${ }^{23}$ Technical Electives ..... 9
${ }^{34}$ Free Electives ..... 2-3

## Footnotes

${ }^{1}$ Choose from the University General Education list.
${ }^{2}$ Select from ALEC 440*, ENGL 295* or ENGL 360*, FORS 321*, JREM 450* or JREM


#### Abstract

451*. ${ }^{23}$ Note that some electives have required prerequisites. The prerequisites are either required in the major or are listed below. See individual course descriptions in the catalog for specific information. ANSC 220, ANSC 280, ANSC 320, ANSC 330, ANSC 380, ANSC 381; BCMB 306, BCMB 310, BCMB 311, BCMB 321, BCMB 401, BCMB 402, BCMB 404, BCMB 471, BCMB 481; BIOL 240, BIOL 250; Biosystems Engineering Technology (any course not required for the major); CHEM 230, CHEM 310, CHEM 319, CHEM 320, CHEM 329, CHEM 350, CHEM 360, CHEM 369, CHEM 430, CHEM 439, CHEM 471, CHEM 481; EEB 240, EEB 304, EEB 305, EEB 330, EEB 370, EEB 410, EEB 414, EEB 421, EEB 424, EEB 433, EEB 470, EEB 474, EEB 484, EEB 495; EPP 313, EPP 321, EPP 451; Environmental and Soil Sciences (any course not required for the major); FDST 420, FDST 429; FORS 314, FORS 321; FWF 250, FWF 312, FWF 313, FWF 317, FWF 320, FWF 412, FWF 420; GEOG 101, GEOG 102, GEOG 131, GEOG 132, GEOG 310, GEOG 334, GEOG 410, GEOG 411, GEOG 412, GEOG 413, GEOG 414, GEOG 434, GEOG 436, GEOG 439; GEOL 101, GEOL 102, GEOL 103, GEOL 201, GEOL 202, GEOL 203, GEOL 310, GEOL 370, GEOL 450, GEOL 455, GEOL 485; JREM 450, JREM 451; MICR 310, MICR 319, MICR 410, MICR 411, MICR 470; PHYS 222; PLSC 250, PLSC 434, PLSC 435, PLSC 457, PLSC 461; POLS 300, POLS 330, POLS 340, POLS 430, POLS 431, POLS 440, POLS 442, POLS 470; SOCI 360, SOCI 462, SOGI464, SOCI 465; Statistics (any course above 201). ${ }^{34}$ Free electives may be selected from any courses not already required for the major.


## REVISE ENVIRONMENTAL AND SOIL SCIENCES MAJOR—LAND SURVEYING CONCENTRATION

Second Year Hours CreditAGNR 2903
${ }^{2}$ Arts and Humanities Elective* ..... 3
${ }^{2}$ Cultures and Civilizations Elective* ..... 3
AREC AGEC 201* or ECON 201* ..... 4
ESS 210 ..... 4
FWF 212 ..... 3
MATH 202* ..... 3
PHYS 221*
3
CMST 210* or CMST 240* ..... 3
STAT 201* ..... 3

## Footnotes

${ }^{3}$ Choose from the following list or from alternatives after consultation with advisor. Note that some electives have required prerequisites. See individual course descriptions for specific information. CE 210, CE 355, CE 455; GEOG 310, GEOG-412, or other technical courses chosen with approval of academic advisor.

## REVISE ENVIRONMENTAL AND SOIL SCIENCES MAJOR—OFF-ROAD VEHICLE TECHNOLOGY CONCENTRATION

| Second Year | Hours Credit |
| :--- | ---: |
| CMST 210* or CMST 240* | 3 |
| AGNR 290 | 3 |
| AREC AGEG 201* or ECON 201* | 4 |
| PHYS 221* | 4 |
| BSET 202 | 3 |
| ${ }^{2}$ Arts and Humanities Elective* | 3 |
| ESS 210 | 4 |
| STAT 201* | 3 |
| FWF 250* | 3 |
| ${ }^{3}$ Technical Elective | 3 |

## Second Year

3AGNR 290 ..... 3PHYS 221*4
BSET 202 ..... 3
ESS 2104
FWF 250*3

## Footnotes

${ }^{\frac{3}{3}}$ Choose from the following list or from alternatives after consultation with advisor. Note that some electives have required prerequisites. See individual course descriptions for specific information. AREC AGEG 444; FWF 416; PHHL 245; IE 304, IE 423, or other technical courses chosen with approval of academic advisor.

| AGNR 290 | 3 |
| :---: | :---: |
| ${ }^{1}$ Arts and Humanities Electives ${ }^{*}$ | 63 |
| ${ }^{1}$ Cultures and Civilizations Elective* | 3 |
| AREC AGEG 201* or ECON 201* | 4 |
| ESS 210 | 4 |
| GEOL 101* | 4 |
| PHHL 245* | 3 |
| PHYS 221* | 4 |
| STAT 201* | 3 |
| Third Year |  |
| BSET 326 or BSET 412 | 3 |
| CHEM 110* or CHEM 350 | 3-4 |
| CHEM 310, CHEM 319 | 4 |
| ESS 301*, ESS 324, ESS 334, ESS 454 | 10 |
| PLSC 250 | 3 |
| ${ }^{23}$ Technical Electives | 6 |
| PHIL 346* | 3 |
| ${ }^{2}$ Gommunicating Through Writing Elective* | 3 |
| Fourth Year |  |
| AREC AGEC 470 or ECON 362 | 3 |
| ESS 434, ESS 442, ESS 444, ESS 462 | 12 |
| ${ }^{1}$ Social Sciences Elective* | 3 |
| ${ }^{23}$ Technical Electives | 6 |
| Free Electives | 5-6 |
| Footnotes |  |
| ${ }^{1}$ Choose from the University General Education list. |  |
| ${ }^{2}$ Select from ALEC 440*, ENGL 295* or ENGL 360*, FORS 321*, JREM 450* or JREM 451*. <br> ${ }^{23}$ Note that some electives have required prerequisites. The prerequisites are either required |  |
| in the major or are listed below. See individual course descriptions in the catalog for specific information. ANSC 220, ANSC 280, ANSC 320, ANSC 330, ANSC 380, ANSC 381; BCMB |  |
| BCMB 481; BIOL 240, BIOL 250; Biosystems Engineering Technology (any course not required for the major); CHEM 230, CHEM 310, CHEM 319, CHEM 320, CHEM 329, CHEM |  |
| 350, CHEM 360, CHEM 369, CHEM 430, CHEM 439, CHEM 471, CHEM 481; EEB 240, EEB |  |
| 470, EEB 474, EEB 484, EEB 495; EPP 313, EPP 321, EPP 451; Environmental and Soil |  |
| Sciences (any course not required for the major); FDST 420, FDST 429; FORS 314, FORS |  |
| 321; FWF 250, FWF 312, FWF 313, FWF 317, FWF 320 FWF 412, FWF 420; GEOG 101, |  |
| 412 , GEOG 413, GEOG 414, GEOG 434, GEOG 436, GEOG 439; GEOL 101, GEOL 102, |  |
| GEOL 103, GEOL 201, GEOL 202, GEOL 203, GEOL 310, GEOL 370, GEOL 450, GEOL 455, |  |
| GEOL 485; JREM 450, JREM 451; MICR 310, MICR 319, MICR 410, MICR 411, MICR 470; |  |
| PHYS 222; PLSC 250, PLSC 434, PLSC 435, PLSC 457, PLSC 461; POLS 300, POLS 330, |  |
| POLS 340, POLS 430, POLS 431, POLS 440, POLS 442, POLS 470; SOCI 360, SOCI 462,SOCI 464, SOCI 465; Statistics (any course above 201). |  |
|  |  |

## DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY

REVISE FOOD SCIENCE AND TECHNOLOGY MAJOR—PRE-PROFESSIONAL AND PRE-PROFESSIONAL 3+1 CONC
Second Year
CHEM 350, CHEM 360-CHEM 3698
FDST 201 1
${ }^{4}$ FDST 241 3
MICR 210* or higher 3
${ }^{5}$ PHYS 221* 4
${ }^{1}$ Social Sciences Electives* 6
${ }^{56}$ Directed Pre-Professional Requirements 139

## Footnotes

${ }^{5}$ PHYS 222 is taken as a directed science elective for pre-professional programs that require it.
${ }^{56}$ Choose from BCMB 230 , BCMB 401, BCMB 402; MICR 430, PHYS 221, PHYS 222, EEB 240;
BIOL 240, FDST 390, FDST 415, FDST 430, FDST 441, FDST 442, FDST 445, FDST 461, FDST
495 or FDST 493 (maximum of 3 hours). PHYS 221 and PHYS 222 should be taken for pre-
professional programs that require one or both courses.
${ }^{67}$ Students who gain admittance to a professional school must complete a Communicating
Orally (OC) course before entering the professional school to meet minimum general education requirements.
${ }^{78}$ Choose from FDST 150, FDST 240, FDST 390, FDST 415, FDST 430, FDST 441, FDST 442, FDST 445, FDST 461, FDST 462 , FDST 495 or FDST 493 (maximum of 3 hours).

## REVISE FOOD SCIENCE AND TECHNOLOGY MAJOR-TECHNOLOGY/BUSINESS CONCENTRATION

## Footnotes

${ }^{6}$ ACCT 200; ADVT 250; Agricultural and Extension Education (any course); Agriculture and Natural Resources (any course); Agricultural Economics (any course); Animal Science (any course); BCMB 230, BCMB 310, BCMB 401, BCMB 402; BIOL 101, BIOL 102, BIOL 111, BIOL 112, BIOL 140 or BIOL 240; Biosystems Engineering (any course); MGT BUAD 201; CHEM 130, CHEM 360, CHEM 369; CCI 150; CMST 201; EEB 240; ECON 201; Entomology and Plant Pathology (any course); Environmental and Soil Sciences (any course); FINC 300; FDST 269, FDST 430, FDST 441, FDST 461, FDST 493 (limit 3 hours for FDST 493); Forestry, Wildlife and Fisheries (any course); PUBH 430; HRT 210, HRT 311, HRT 326, HRT 341, HRT 445; INSC 102; JREM 175, JREM 200; MGT 300; MARK 300; MICR 430; NUTR 104, NUTR 201, NUTR 302, NUTR 303, NUTR 313, NUTR 314, NUTR 412, NUTR 415, NUTR 416, NUTR 420; PHYS 101, PHYS 102, PHYS 221 or PHYS 222; Plant Sciences (any course); PBRL 270; STAT 201.

## DEPARTMENT OF FORESTRY, WILDLIFE AND FISHERIES

## REVISE FORESTRY MAJOR—FOREST RESOURCES MANAGEMENT CONCENTRATION

Second Year
Hours CreditFORS 214 or FORS 217, FORS 215FWF 2126AREC AGEG 201* or ECON 201*4
STAT 201* ..... 3
BSET 326 or GEOG 411 ..... 3
CMST 210* or CMST 240* ..... 3
ESS 210 ..... 4
${ }^{1}$ Arts and Humanities Elective* ..... 3
${ }^{1}$ Cultures and Civilizations Elective* ..... 3
Third Year
FWF 310, FWF 312*, FWF 313, FWF 317, FWF 320412 ..... 13
FORS 314 or FORS 317, FORS 321 or FORS 327, FORS 326 ..... 7
EPP 411 ..... 3
${ }^{1}$ Cultures and Civilizations Elective* ..... 3
${ }^{2}$ Ethics Elective ..... 3

## Footnotes

${ }^{2}$ Choose one course from PHIL 101 110*(AH), PHIL 130, PHIL 252* (AH, WC), PHIL
243*(AH, WC), PHIL 245*(AH), PHIL 290*(AH, WC), or PHIL 340*(WC), PHIL 345*
(WC), PHIL 346* (WC), PHIL 391* (WC). If the student selects an Ethics Elective that satisfies the Arts and Humanities General Education Requirement, then the student may select an additional Free Elective in lieu of the Arts and Humanities Elective listed in the Fourth Year.

REVISE FORESTRY MAJOR—WILDLAND RECREATION CONCENTRATION

| Second Year | Hours Credit |
| :--- | ---: |
| FORS 214 or FORS 217, FORS 215 | 6 |
| FWF 212 | 3 |
| AREC AGEG 201* or ECON 201* | 4 |
| STAT 201* | 3 |
| BSET 326 or GEOG 411 | 3 |
| CMST 210* or CMST 240* | 3 |
| ESS 210 | 4 |
| Select one: ARTA AMED 231, ARTC AMED 236; CMST 312, CMST 412, CMST |  |
| 414, CMST 419, CMST 444; ENGL 295*; JREM 390, JREM 412, JREM 422, | 3 |
| JREM 450*, JREM 451* |  |
| ${ }^{1}$ Cultures and Civilizations* or Arts and Humanities* Elective | 3 |

Third Year
FORS 321*, FORS 423 ..... 6
FWF 310, FWF 312*, FWF 313, FWF 317, FWF 320412 ..... 13
Select one: FORS 314 or FORS 317, PLSC 427, POLS 440, POLS 441, MGT 440 ..... 2-3
Select one: RSM 310, RSM 415, RSM 430 ..... 3
Select one: PLSC 280, PLSC 350, PLSC 370, PLSC 421 or PLSC 437 ..... 2-3
${ }^{1}$ Cultures and Civilizations or Arts and Humanities Elective ..... 3
Fourth Year
FORS 422, FORS 495 ..... 9
FWF 416 ..... 3
Select one: WFS 443, WFS 444, WFS 445 ..... 3
Electives ..... 5-6
Select one: GEOG 320, GEOG 345, PHIL 346 245, SOCI 345, SOCI 360, SOCI 370, ..... 3
SOCI-464, SOCI 465
${ }^{1}$ Cultures and Civilizations or Arts and Humanities Electives ..... 6
REVISE WILDLIFE AND FISHERIES SCIENCE MAJOR—WILDLIFE AND FISHERIES MGT CONCENTRATION
Second Year Hours Credit
FWF 2123
AREC AGEG 201* or ECON 201* ..... 4
MATH 125* ..... 3
STAT 201* or MATH 115*
3
BSET 326 or GEOG 411 ..... 3
ANSC 220
3-4
BIOL 250 or FORS 214 or FORS 217 ..... 3
ESS 210 ..... 4
${ }^{1}$ Cultures and Civilizations* or Arts and Humanities Elective* ..... 3
Fourth Year
FWF 415, FWF 416 ..... 4
WFS 305, WFS 323, WFS 340, WFS 341, WFS 350, WFS 440, WFS 442, WFS ..... 18
FWF 320412 or FORS 422 ..... 3
${ }^{2}$ Science Elective ..... 3

REVISE WILDLIFE AND FISHERIES SCIENCE MAJOR—WILDLIFE HEALTH CONCENTRATION

| Third Year | Hours Credit |
| :--- | ---: |
| WFS 301 | 3 |
| FWF 317 | 3 |
| ANSC 380 | 3 |
| BCMB 440, BCMB 401 | 7 |
| AREC AGEC 201* or ECON 201* | 4 |
| CMST 210 or CMST 240* | 3 |
| ${ }^{1}$ Cultures and Civilizations* or Arts and Humanities Electives* | 6 |
|  |  |
| Footnotes |  |
| ³00-level and above from Animal Science; Biosystems Engineering Technology; Ecology and |  |
| Evolutionary Biology; Entomology and Plant Pathology; Environmental and Soil Sciences; |  |
| Forestry; Forestry, Wildlife and Fisheries; Plant Sciences; or GEOG 410, GEOG 411, GEOG-412, |  |
| GEOG 413, GEOG 436. |  |

## REVISE WILDLIFE AND FISHERIES SCIENCE MINOR

## Minor Requirements

The minor consists of 15 hours.

## Complete:

- FWF 250 - Conservation
- FWF 317 - Principles of Wildlife and Fisheries Management


## Select 3 courses:

- FWF 416 - Planning and Management of Forest, Wildlife and Fisheries Resources
- Any 300-level and above WFS courses
- WFS 433-Amphibian Ecology and Conservation
-WFS 443 - Fisheries Science
- WFS 444-Ecology and Management of Wild Mammals
- WFS 445-Ecology and Management of Wild Birds


## DEPARTMENT OF PLANT SCIENCES

## REVISE DEPARTMENT TEXT (INTRODUCTION)

Academic programs in the Department of Plant Sciences span the art, science and technology of plant use in society. Students receive preparation for careers in plant science within seven six concentrations - landscape design and construction; biotechnology; horticulture science and production; bioenergy; organic production, public horticulture; and turfgrass science and management. With increasing emphasis placed on plants in urban areas, extensive training is offered in landscape horticulture (planning, implementation and management for landscapes, turf and gardens).

## REVISE DEPARTMENT TEXT (SPECIALTY AREAS)

## Business

ACCT 200; AREC AGEG 355, AREC AGEG 470; MGT BUAD 201, MARK 300; STAT 201.

## REVISE PLANT SCIENCES MAJOR-BIOENERGY CONCENTRATION

| First Year | Hours Credit |
| :---: | :---: |
| ${ }^{1}$ AGNR 100 or FYS FYRS 101 | 1 |
| BIOL 111*, BIOL 112* | 8 |
| CHEM 120* and CHEM 130* | 8 |
| ENGL 101*, ENGL 102* | 6 |
| PLSC 250 | 3 |
| ${ }^{2,3}$ Quantitative Reasoning Electives* | 6 |
| Third Year |  |
| AREC AGEC 212 | 3 |
| BCMB 321 | 3 |
| ${ }^{3}$ Cultures and Civilizations Elective* | 3 |
| ${ }^{5}$ ALEC 440* or ENGL 295* or ENGL 360* | 3 |
| PLSC 452, PLSC 435 | 5 |
| ${ }^{6}$ Technical Electives | 13 |
| Footnotes |  |
| ${ }^{4}$ Economics Elective: AREC 201 (4) Economics of the Global Food and Fiber System and |  |
| ECON 201 (4) Principles of Economics satisfy satisfies the University General EducationSocial Science requirement and the major requirement for economics. If the student transfers |  |
|  |  |
| ECON LD for 3 credits, it will satisfy the major requirement for economics but will not satisfy the General Education-Social Science requirement. In these cases, the student should take |  |
| two courses from the approved General Education-Social Sciences list. |  |

## Specialty Areas

Business
ACCT 200; AREC AGEG 355, AREC AGEG 470; MGT BUAD 201, MARK 300; STAT 201.

## REVISE PLANT SCIENCES MAJOR-BIOTECHNOLOGY CONCENTRATION

First YearHours Credit${ }^{1}$ AGNR 100 or FYS FYRS 101 ..... 1
${ }^{2}$ Arts and Humanities Elective* ..... 3
BIOL 111*, BIOL 112* ..... 8
CHEM 120* and CHEM 130* ..... 8
ENGL 101*, ENGL 102* ..... 6
${ }^{2,3}$ Quantitative Reasoning Electives* ..... 6
Second Year
AGNR 290 ..... 3
AREC AGEG 212 ..... 3
${ }^{2}$ Arts and Humanities Elective* ..... 3
CMST 210* or CMST 240* ..... 3
${ }^{2}$ Cultures and Civilizations Elective* ..... 3
ESS 210 ..... 4
${ }^{3}$ Economics Elective* ..... 3-4
PLSC 210 ..... 3
${ }^{2,3}$ Social Sciences Elective* ..... 3
Unrestricted Electives ..... 4-5 2-3
Third Year
BSET 325, BSET 326 , BSET 412 , BSET 414 ..... 12
${ }^{3}$ MGT BUAD 201 ..... 34
BULW 301 ..... 23
${ }^{2}$ Cultures and Civilizations Elective* ..... 3
CE 442 ..... 3
ESS 324 ..... 3
${ }^{3}$ MGT 300 ..... 3${ }^{3}$ Economics Elective: AREC 201 (4) Economics of the Global Food and Fiber System andECON 201 (4) Principles of Economics satisfy satisfies the University General Education-SocialScience requirement and the major requirement for economics. If the student transfers ECONLD for 3 credits, it will satisfy the major requirement for economics but will not satisfy theGeneral Education-Social Science requirement. In these cases, the student should take twocourses from the approved General Education-Social Sciences list.
REVISE PLANT SCIENCES MAJOR-HORTICULTURE SCIENCE AND PRODUCTION CONCENTRATION
First Year
Hours Credit
${ }^{1}$ AGNR 100 or FYS FYRS 101 ..... 1
${ }^{2}$ Arts and Humanities Elective* ..... 3
BIOL 111*, BIOL 112* ..... 8
CHEM 100 and CHEM 110*, or CHEM 120* and CHEM 130*
${ }^{8}$
ENGL 101*, ENGL 102*
6
6
${ }^{2}$ Quantitative Reasoning Electives*

## Footnotes

${ }^{3}$ Economics Elective: AREC 201 (4) Economics of the Global Food and Fiber System and ECON 201 (4) Principles of Economics satisfy satisfies the University General Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credits, it will satisfy the major requirement for economics but will not satisfy the General Education-Social Science requirement. In these cases, the student should take two courses from the approved General Education-Social Sciences list.

## $\leqslant$ DROP PLANT SCIENCES MAJOR—LANDSCAPE DESIGN AND CONSTRUCTION CONCENTRATION <br> $\diamond$ ADD PLANT SCIENCES MAJOR-LANDSCAPE DESIGN CONCENTRATION

## REVISE PROGRAM TEXT (PLANT SCIENCES MAJOR—LANDSCAPE DESIGN CONCENTRATION)

Landscape designers create aesthetic concepts and practical designs for improved outdoor living. Students study fundamental and advanced landscape design, landscape design graphics, computer-aided landscape design, surveying, art, socio-economic impact of plants, field botany, professional practices, contracting, basic woody plant identification, landscape construction and maintenance methods. The development of comprehensive design projects helps students prepare for careers in landscape design or advanced studies in landscape architecture. Graduates in design and construction are prepared for employment in several professions in ornamental horticulture. Careful selection of departmental courses and other electives in consultation with the assigned academic advisor will allow graduates to pursue suitable career paths. A minimum grade point average of 2.25 is required for all plant sciences courses taken in the major.

REVISE PLANT SCIENCES MAJOR—LANDSCAPE DESIGN CONCENTRATION

| First Year | Hours Credit |
| :---: | :---: |
| ${ }^{1}$ AGNR 100 or FYS FYRS 101 |  |
| ${ }^{2}$ Arts and Humanities Elective* | 3 |
| BIOL 111*, BIOL 112* | 8 |
| CHEM 100* or CHEM 120* | 4 |
| COSC 100* | 34 |
| ENGL 101*, ENGL 102* | 6 |
| ${ }^{2}$ Quantitative Reasoning Electives* | 3 |
| ${ }^{2,3}$ Social Sciences Elective* | 3-6 |
| Second Year |  |
| CMST 210* or CMST 240* | 3 |
| ${ }^{3}$ Economics Elective* | 3-4 |
| ESS 210 | 4 |
| PLSC 210, PLSC 220, PLSC 221 , PLSC 280 | 12 |
| ${ }^{4}$ Technical Electives | 7 |
| Unrestricted Elective | $3-5 z-4$ |
| Fourth Year |  |
| ${ }^{2}$ Arts and Humanities Elective* | 3 |
| ${ }^{2}$ Cultures and Civilizations Elective* | 3 |
| PLSC 421, PLSC 460, PLSC 480, PLSC 485 | 13 |
| Select from: PLSC 348, PLSC 410*, PLSC 427, |  |
| PLSC 434, PLSC 436, PLSC 437, PLSC 441, P |  |
| PLSC 469, PLSC 470, PLSC 493, or PLSC 497 | 5-6 |
| ${ }^{4}$ Technical Electives | 4-5 |
| Footnotes |  |
| ${ }^{3}$ Economics Elective: AREC 201 (4) Economics of the Global Food and Fiber System |  |
| and ECON 201 (4) Principles of Economics satisfy satisfies the University General |  |
| Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credit hours, it will satisfy the major requirement for economics but will not satisfy the University General Education-Social Science requirement. In these cases, the student should take two courses from the Social |  |
| Sciences list. |  |
| ${ }^{4}$ Any Business Administration; Entomology and Plant Pathology; Plant Sciences; |  |
|  |  |
| 232, ARCH 271; ART 101, ART 103; ARTA ADRA 211, ARTA ADRA 212; ARTA AMED |  |
| 231, ARTA AMED 331; ARTA APAI 213, ARTA APAI 214, ARTA APAI 215, ARTA APAI |  |
| 216; BCMB 306; BIOL 250; BSET 202, BSET 412; BULW 301; CMST 414; EEB 304, EEB 330, EEB 433; ENGL 295*, ENGL 360*; ESS 324, ESS 334; FORS 321; FWF 212, |  |
|  |  |
| FWF 250, FWF 312, FWF 317; GEOG 131, GEOG 365, GEOG 366; GEOL 201, GEOL |  |
| 202, GEOL 203; PHIL 243*, PHIL 244, PHIL 346 245*; SPAN 111, SPAN 112, SPAN |  |
| 211, SPAN 212; UNST 413. |  |

## ADD PLANT SCIENCES MAJOR—ORGANIC PRODUCTION CONCENTRATION

Requirements for the Bachelor of Science in Plant Sciences - Plant Sciences Major - Organic Production Concentration The organic production concentration is designed to create leaders in the field of organic and sustainable agriculture. Students will gain the knowledge and skills for production and management of organic cropping systems. Employment prospects include owning your own organic farm, consulting, agricultural extension, environmental education, government agencies, international agricultural development, and research. Careful selection of departmental courses and other electives in consultation with the assigned academic advisor will prepare graduates for the career of their choice. This concentration also prepares students with a strong interest in the science of organic crop production for graduate studies (M.S., Ph.D.) in horticulture, agronomy, or related disciplines. Classroom instruction is enhanced by the 90 -acre Organic Crops Research Unit located near the University of Tennessee campus.

## First Year

${ }^{1}$ AGNR 100 or FYS FYRS 101 1
${ }^{2}$ Arts and Humanities Elective* 3
BIOL 111*, BIOL 112* 8
CHEM 100*-CHEM 110* or CHEM 120*-CHEM 130* 8
ENGL 101*, ENGL 102* 6
${ }^{2}$ Quantitative Reasoning Electives* 6

## Second Year

| AGNR 290 | 3 |
| :---: | :---: |
| ${ }^{2}$ Arts and Humanities Elective* | 3 |
| CMST 210* or CMST 240* | 3 |
| ${ }^{2}$ Cultures and Civilizations Elective* | 3 |
| ESS 210 | 4 |
| EPP 313 | 3 |
| ${ }^{2,3}$ Social Sciences Electives | 6-7 |
| PLSC 210, PLSC 275 | 6 |
| Third Year |  |
| BIOL 250 | 4 |
| BCMB 321 or PLSC 348 or FORS 414 | 2-3 |
| ${ }^{2}$ Cultures and Civilizations Elective* | 3 |
| ESS 334 | 3 |
| PLSC 330, PLSC 434 | 6 |
| Select from: PLSC 220, PLSC 221, PLSC 331, PLSC 410 (WC), PLSC 430, PLSC 435, PLSC 452, PLSC 457, PLSC 461, PLSC 493 | 6 |
| ${ }^{4}$ Technical Electives | 6 |
| Third Year - Summer |  |
| PLSC 492 | 3 |
| Fourth Year |  |
| PLSC 415 | 3 |
| EPP 321 | 3 |
| ESS 434 or 454 | 3 |
| Select from: PLSC 220, PLSC 221, PLSC 331, PLSC 410, PLSC 430, PLSC 435, PLSC 452, PLSC 457, PLSC 461, PLSC 493 | 6 |
| ${ }^{4}$ Technical Electives | 6 |
| Unrestricted Electives | 4-6 |
| TOTAL | 123 |

* Meets University General Education Requirement .
${ }^{1}$ Required of freshmen only; requirement is waived for transfer students.
${ }^{2}$ Choose from the University General Education list. Selection should be made in conference with
academic advisor.
${ }^{3}$ ECON 201 (4) Principles of Economics and AREC 201 (4) Economics of the Global Food and Fiber System satisfy satisfies the University General Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credit hours, it will satisfy the major requirement for economics but will not satisfy the University General EducationSocial Sciences requirement. In these cases, the student should take two courses from the Social Sciences list.
${ }^{4}$ Any 300-level and above from Agricultural Economics, Environmental and Soil Science, Forestry, Plant Sciences, Entomology and Plant Pathology, Geology; 200-level and above from Biology, Business Administration; Biochemistry and Cellular and Molecular Biology, Biosystems Engineering, Biosystems Engineering Technology, Chemistry, Ecology and Evolutionary Biology, Food Science, Management, Marketing, Microbiology, Physics, Spanish, Statistics, or approved foreign language; and ACCT 200; AREC AGEG 212; BULW 301; ENGL 295, ENGL 360; FDST 150; FINC 300; GEOL 201, GEOL 202, GEOL 206; JREM 450, JREM 451, JREM 456, PHIL 130, PHYS 101; SOCI 360.

REVISE PLANT SCIENCES MAJOR—PUBLIC HORTICULTURE CONCENTRATION

| First Year | Hours Credit |
| :--- | ---: |
| ${ }^{1}$ AGNR 100 or FYS FYRS 101 | 1 |
| ${ }^{2}$ Arts and Humanities Elective* | 3 |
| BIOL 111*, BIOL 112* | 8 |
| CHEM 100* or CHEM 120* | 4 |
| COSC 100* | 34 |
| ENGL 101*, ENGL 102* | 6 |
| ESS 210 | 4 |
| ${ }^{2}$ Quantitative Reasoning Electives* | 3 |
| Fourth Year |  |
| EPP 313 or EPP 321 | 3 |
| EPP 410 | 3 |

Select from: PLSC 427, PLSC 429, PLSC 430, PLSC 437, PLSC 439,
PLSC 446, or PLSC 469 or PLSC 493
${ }^{4}$ Technical Electives
Select from: PLSC 275, PLSC 415, PLSC 421 or Unrestricted Electives 73

## Footnotes

${ }^{3}$ Economics Elective: AREC 201 (4) Economics of the Global Food and Fiber System and ECON 201 (4) Principles of Economics satisfy satisfies the University General EducationSocial Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credit hours, it will satisfy the major requirement for economics but will not satisfy the University General Education-Social Science requirement. In these cases, the student should take two courses from the Social Sciences list.
${ }^{4}$ Any 300 -level and above from Environmental and Soil Sciences; Forestry; ART 481;
ALEC 345; CMST 442; EEB 309, EEB 330, EEB 433; EDPY 210; ENGL 295*, ENGL 360*; PHIL 346 245*; PBRL 270; RSM 201, RSM 430.

REVISE PLANT SCIENCES MAJOR-TURFGRASS SCIENCE AND MANAGEMENT CONCENTRATION

First Year
${ }^{1}$ AGNR 100 or FYS FYRS 101
${ }^{2}$ Arts and Humanities Elective*
CHEM 100*-CHEM 110* or CHEM 120*-CHEM 130* GHEM $120^{*}$ and CHEM 130*
${ }^{2}$ Cultures and Civilizations Elective*
ENGL 101*, ENGL 102*

## Hours Credit

1
3

3
${ }^{2}$ Quantitative Reasoning Electives*
${ }^{2,3}$ Social Sciences Elective*

## Second Year

AGNR 290
3
BIOL 111*, BIOL 112* 8
CMST 210* or CMST 240* 3
${ }^{3}$ Economics Elective* 3-4
ESS 210 3
PLSC 210, 240, PLSC $241 \quad 74$
PLSC 220 or PLSC 221 3
Unrestricted Electives Z-3
Third Year
${ }^{2}$ Cultures and Civilizations Elective*
PLSC 220 or PLSC 221 Select from: PLSC 210, PLSC 220, PLSC 221, or 3 PLSG 280
EPP 313
PLSC 233, PLSC 330, PLSC 331, PLSC 341, PLSC 343, PLSC 438, PLSC 348, PLSC 442, PLSC 462 and PLSC 466 and PLSC 457
${ }^{4}$ Technical Electives
Unrestricted Electives
Third Year - Summer
PLSC 492
3

Fourth Year
${ }^{1}$ Arts and Humanities Elective* 3
BIOL 250 or BCMB 321 or FORS 414 3-4
EPP 313 3
Select from: PLSC 330, PLSC 348, PLSC 360, PLSC 370, PLSC 410*, 9
PLSC 415, PLSC 421, PLSC 427, PLSC 429, PLSC 430, PLSC 434,
PLSC 435, PLSC 436, PLSC 437, PLSC 438, PLSC 446, PLSC 451,
PLSC 452, PLSC 461, PLSC 462, PLSC 466, PLSC 469, or PLSC 494
PLSC 441, PLSC 457, PLSC 470
85
${ }^{4}$ Technical Electives

# COLLEGE OF ARCHITECTURE AND DESIGN 

## All changes effective Fall 2011

## PROGRAM CHANGES

## INTERIOR DESIGN PROGRAM

IDS 211 14
ARCH 101, ARCH 121, ARCH 122, ARCH 171, ARCH 172
ENGL 101 *, ENGL 102*
ARTH AHIS 172 *, ARTH AHIS 173 *

## COLLEGE OF ARTS AND SCIENCES

All changes effective Fall 2011

## PART I: COURSE CHANGES

## SCHOOL OF ART

## (135) (ACER) Art Ceramics

DROP ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

| ACER | 191 | Introduction to Studio Art: Various Media (3) |
| :--- | :--- | :--- |
| ACER | 221 | Ceramic Sculpture (3) |
| ACER | 222 | Beginning Pottery (3) |
| ACER | 225 | Portfolio Practicum—Handbuilding (3) |
| ACER | 226 | Portfolio Practicum—Throwing (3) |
| ACER | 229 | Ceramics: Special Topics (3) |
| ACER | 320 | Ceramics: Portfolio Review (0) |
| ACER | 321 | Ceramics: Handbuilding II (4) |
| ACER | 322 | Ceramics: Throwing II (4) |
| ACER | 323 | Intermediate Pottery and Ceramic Sculpture (4) |
| ACER | 391 | Intermediate Ceramics (3-4) |
| ACER | 421 | Advanced Ceramic Sculpture |
| ACER | 422 | Advanced Pottery |
| ACER | 424 | Ceramics: Clays and Glazes |
| ACER | 429 | Ceramics: Special Topics |
| ACER | 493 | Independent Study (1-4) |
| ACER | 494 | Individual Problems (3) |
| ACER | 495 | Visiting Artist Seminar (2) |
| ACER | 496 | Capstone (6) |

## (136) (ADES) Art Design/Graphic

DROP ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

| ADES | 150 | The Idea of Graphic Design (3) |
| :--- | :--- | :--- |
| ADES | 251 | Beginning Graphic Design I (3) |
| ADES | 252 | Beginning Graphic Design II (3) |
| ADES | 255 | Graphic Design Production (3) |
| ADES | 259 | Special Topics: Graphic Design (3) |
| ADES | 350 | Graphic Design Portfolio Review (0) |
| ADES | 351 | Intermediate Graphic Design I (4) |
| ADES | 352 | Intermediate Graphic Design II (4) |
| ADES | 400 | Typography (3) |
| ADES | 401 | Experiments in Sequencing (4) |
| ADES | 402 | Experiments in Space (4) |
| ADES | 403 | Experiments in Systems (4) |
| ADES | 405 | Computer Enhanced Graphic Design (3) |
| ADES | 410 | Advanced Typographic Investigation (3) |
| ADES | 425 | Illustration (3) |
| ADES | 444 | Graphic Design Center Practicum (3) |
| ADES | 450 | Design in Culture (3) |
| ADES | 451 | Advanced Graphic Design (4) |
| ADES | 452 | Graphic Design Seminar (4) |
| ADES | 455 | Graphic Design Professional Seminar (3) |
| ADES | 456 | Graphic Design Practicum (1-12) |
| ADES | 459 | Special Topics in Graphic Design (3) |
| ADES | 493 | Independent Study (1-6) |
| ADES | 494 | Individual Problems (3) |
| ADES | 495 | Visiting Artist Seminar (2) |

## (137) (ADRA) Art Drawing

| ADRA | 191 | Introduction to Studio Art: Various Media (3) |
| :--- | :--- | :--- |
| ADRA | 211 | Drawing I (3) |
| ADRA | 212 | Drawing II (3) |
| ADRA | 219 | Special Topics in Drawing/Painting (3) |
| ADRA | 311 | Drawing III (4) |
| ADRA | 312 | Drawing Portfolio Review (0) |
| ADRA | 391 | Intermediate Drawing (3-4) |
| ADRA | 411 | Drawing IV (6) |
| ADRA | 419 | Special Topics in Drawing and Painting (3) |
| ADRA | 493 | Independent Study (1-6) |
| ADRA | 494 | Individual Problems (3) |
| ADRA | 495 | Visiting Artist Seminar (2) |
| ADRA | 496 | Capstone (6) |

## (139) (AHIS) Art History

DROP ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

| AHIS | 162 | Art of Africa, Oceania, and Pre-Columbian America (3) |
| :--- | :--- | :--- |
| AHIS | 167 | Honors: Art of Africa, Oceania, and Pre-Columbian America (3) |
| AHIS | 172 | Western Art I (3) |
| AHIS | 173 | Western Art II (3) |
| AHIS | 177 | Honors: Western Art I (3) |
| AHIS | 178 | Honors: Western Art II (3) |
| AHIS | 183 | Asian Art (3) |
| AHIS | 187 | Honors: Asian Art (3) |
| AHIS | 279 | Special Topics in Art History (3) |
| AHIS | 375 | Seminar in Art History I (3) |
| AHIS | 402 | Seminar in Art History II (3) |
| AHIS | 403 | History of Photography (3) |
| AHIS | 411 | Art of South and Southeast Asia (3) |
| AHIS | 415 | Art of China (3) |
| AHIS | 416 | Chinese Art of the 20th and 21st Centuries (3) |
| AHIS | 419 | Art of Japan (3) |
| AHIS | 425 | Early Christian and Byzantine Art to 1350 (3) |
| AHIS | 431 | Medieval Art of the West, 800-1400 (3) |
| AHIS | 441 | Northern European Painting, 1350-1600 (3) |
| AHIS | 442 | Art of Northern Europe, 1600-1675 (3) |
| AHIS | 451 | The Art of Italy, 1250-1450 (3) |
| AHIS | 452 | Art of Italy, 1450-1575 (3) |
| AHIS | 453 | Art of Southern Europe, 1575-1700 (3) |
| AHIS | 454 | Renaissance and Baroque Theory (3) |
| AHIS | 461 | Art of Southern and Eastern Africa (3) |
| AHIS | 462 | Art and Archaeology of Ancient Africa (3) |
| AHIS | 463 | Arts of the African Diaspora (3) |
| AHIS | 464 | Oceanic Art (3) |
| AHIS | 470 | African-American Art (3) |
| AHIS | 472 | History of 20th-Century American Art (3) |
| AHIS | 473 | 19th-Century American Art (3) |
| AHIS | 475 | History of 19th-Century Painting and Sculpture in Europe (3) |
| AHIS | 476 | History of 20th-Century Painting and Sculpture in Europe (3) |
| AHIS | 479 | Special Topics in Art History (3) |
| AHIS | 489 | Studies in Art History (3) |
| AHIS | 493 | Independent Study (1-3) |
| AHIS | 494 | Individual Problems (3) |
|  |  | Ins |

## (134) (AMED) Art Media Arts

DROP ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

| AMED | 191 | Introduction to Studio Art: Various Media (3) |
| :--- | :--- | :--- |
| AMED | 231 | Photography I (3) |
| AMED | 232 | Introduction to Performance as Art (3) |
| AMED | 234 | Introduction to Sound Art (3) |
| AMED | 235 | Introduction to Cinematography as Art (3) |
| AMED | 236 | Introduction to Video Art (3) |
| AMED | 239 | Special Topics in Media Arts (3) |


| AMED | 330 | Media Arts Portfolio Review (0) |
| :--- | :--- | :--- |
| AMED | 331 | Photography II (4) |
| AMED | 341 | Digital Photography (4) |
| AMED | 342 | Large Format Photography I (4) |
| AMED | 391 | Intermediate Media (3-4) |
| AMED | 401 | Experiments in Sequencing (4) |
| AMED | 402 | Experiments in Space (4) |
| AMED | 403 | Experiments in Systems (4) |
| AMED | 431 | Photography III (4) |
| AMED | 432 | Performance as Art (4) |
| AMED | 433 | History of Film and Modern and Contemporary Art (3) |
| AMED | 434 | Sound Art (4) |
| AMED | 435 | Cinematography as Art (4) |
| AMED | 436 | Video Art (4) |
| AMED | 439 | Special Topics in Media Arts (3) |
| AMED | 450 | Senior Project (4) |
| AMED | 493 | Independent Study (1-4) |
| AMED | 494 | Individual Problems (3) |
| AMED | 495 | Visiting Artist Seminar (3) |
| AMED | 496 | Capstone (6) |

## (138) (APAI) Art Painting

DROP ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

| APAI | 191 | Introduction to Studio Art: Various Media (3) |
| :--- | :--- | :--- |
| APAI | 213 | Painting I: Introduction (3) |
| APAI | 214 | Painting II (3) |
| APAI | 215 | Watercolor I: Introduction (3) |
| APAI | 216 | Watercolor II (3) |
| APAI | 219 | Special Topics in Drawing/Painting (3) |
| APAI | 313 | Painting III (4) |
| APAI | 314 | Painting Portfolio Review (0) |
| APAI | 391 | Intermediate Painting (3-4) |
| APAI | 413 | Painting IV (6) |
| APAI | 419 | Special Topics in Drawing and Painting (3) |
| APAI | 493 | Independent Study (1-6) |
| APAI | 494 | Individual Problems (3) |
| APAI | 495 | Visiting Artist Seminar (2) |
| APAI | 496 | Capstone (6) |

## (132) (APRI) Art Printmaking

DROP ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

| APRI | 262 | Intaglio I (3) |
| :--- | :--- | :--- |
| APRI | 263 | Lithography I (3) |
| APRI | 264 | Screen Printing I (3) |
| APRI | 265 | Relief (3) |
| APRI | 266 | Monoprint and Monotype (3) |
| APRI | 269 | Special Topics in Printmaking (3) |
| APRI | 291 | Papermaking Workshop (3) |
| APRI | 360 | Printmaking Portfolio Review (0) |
| APRI | 361 | Intermediate Print Workshop (1-6) |
| APRI | 391 | Intermediate Printmaking (3-4) |
| APRI | 461 | Advanced Print Workshop (1-6) |
| APRI | 469 | Special Topics in Printmaking (3-6) |
| APRI | 493 | Independent Study (1-4) |
| APRI | 494 | Individual Problems (3) |
| APRI | 495 | Visiting Artist Seminar (2) |
| APRI | 496 | Capstone (6) |


| ASCU | 191 | Introduction to Studio Art: Various Media (3) |
| :--- | :--- | :--- |
| ASCU | 240 | Techniques and Tools (1) |
| ASCU | 241 | Beginning Sculpture (3) |
| ASCU | 242 | Figuring the Body (3) |
| ASCU | 243 | Mold-Making and Casting (3) |
| ASCU | 245 | Metal Fabrication (3) |
| ASCU | 246 | Mixed Media Sculpture (3) |
| ASCU | 249 | Special Topics in Sculpture (3) |
| ASCU | 340 | Sculpture Portfolio Review (0) |
| ASCU | 341 | Intermediate Sculpture (3) |
| ASCU | 343 | Advanced Mold-Making and Casting (3) |
| ASCU | 345 | Advanced Metal Fabrication (3) |
| ASCU | 346 | Advanced Mixed Media Sculpture (3) |
| ASCU | 391 | Intermediate Sculpture (3-4) |
| ASCU | 441 | Advanced Sculpture (3) |
| ASCU | 442 | Senior Seminar (2) |
| ASCU | 449 | Special Topics in Sculpture (3) |
| ASCU | 493 | Independent Study (1-4) |
| ASCU | 494 | Individual Problems (3) |
| ASCU | 495 | Visiting Artist Seminar (2) |
| ASCU | 496 | Capstone (6) |

## (ARTA) Art Two-Dimensional Arts

## ADD ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

ARTA 191 - Introduction to Studio Art: Various Media (3) Individual sections for various artistic disciplines.
Repeatability: Course may be repeated. Medium may not be repeated. Maximum 12 hours.
Registration Restriction(s): Non-majors only (not for BA and BFA - studio art majors and BFA - graphic design majors).
ARTA 211 - Drawing I (3) Development of drawing skills from a variety of sources including life drawing. Projects will emphasize composition, technique and content.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTA 212 - Drawing II (3) Techniques of expression in drawing based on both observation and content. Includes a life drawing component.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): 211.
ARTA 213 - Painting I: Introduction (3) Capacities of oil and acrylic painting on canvas.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTA 214 - Painting II (3) Techniques of expression in oil and/or acrylic.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): 213.
ARTA 215 - Watercolor I: Introduction (3) Capacities of transparent watercolor.
(RE) Prerequisite(s): Art 101 and 103.
(RE) Corequisite(s): Art 102.
ARTA 216 - Watercolor II (3) Capacities of transparent watercolor with attention to individual exploration of surface, space, and concept.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): 215.
ARTA 219 - Special Topics in Drawing/Painting (3) Student- or instructor-initiated course offered at convenience of department to enhance and expand the painting, drawing, and watercolor curricula
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTA 231 - Photography I (3) Introduction to the art of photography. Taking and processing of photographs through both traditional film/darkroom and digital.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
Comment(s): Or consent of instructor.
ARTA 262 - Intaglio I (3) Metal plate intaglio printing in traditional and contemporary techniques of etching, softground, drypoint, aquatint, and color methods.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTA 263 - Lithography I (3) Stone and aluminum plate lithography applying traditional and contemporary techniques of crayon, tusche, transfer methods, state proofs, and photolithography.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTA 264 - Screen Printing I (3) Screen printing as a fine art medium including development and application of various basic stencils in compositional printing.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.

ARTA 265 - Relief (3) Relief printing in traditional and contemporary techniques from wood to linoleum and plastics.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTA 266 - Monoprint and Monotype (3) Investigation of traditional and contemporary techniques.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTA 269 - Special Topics in Printmaking (3) Student- or instructor-initiated course offered at convenience of department. Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTA 291 - Papermaking and Book Arts Workshop (3) Papermaking as a medium for two-dimensional and book arts. Emphasis on development of a personal form.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTA 311 - Drawing III (4) Individual expression in drawing using varied media and approaches.
Repeatability: May be repeated. Maximum 8 hours.
(RE) Prerequisite(s): 212 and 312.

ARTA 312 - Drawing Portfolio Review (0) Review of prior work in drawing.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated once.
(RE) Prerequisite(s): Art History 172 and Art History 173.
(RE) Corequisite(s): Art 212.
Comment(s): Successful completion required prior to registration for 300-400 level courses.
ARTA 313 - Painting III (4) Individual expression with varied media on canvas.
Repeatability: May be repeated. Maximum 8 hours.
(RE) Prerequisite(s): 214 and 314.
Comment(s): Total of 8 hours required for students in the painting concentration.
ARTA 314 - Painting Portfolio Review (0) Review of prior work in painting.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated once.
(RE) Prerequisite(s): Art History 172 and Art History 173.
(RE) Corequisite(s): Art 214.
Comment(s): Successful completion required prior to registration for 300-400 level courses.
ARTA 330 - Photography Portfolio Review (0) Review of prior work in photography.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated once.
(RE) Prerequisite(s): Art History 172 and Art History 173.
(RE) Corequisite(s): Art 231.
Comment(s): Successful completion required prior to registration for 300-400 level courses.

ARTA 331 - Photography II (4) Individual expression in photographic medium.
Repeatability: May be repeated. Maximum 8 hours.
(RE) Prerequisite(s): 231 and 330 or permission of instructor.
ARTA 341 - Digital Photography (4) Studio course introducing theory and techniques of use of computer in photography.
Repeatability: May be repeated. Maximum 8 hours.
(RE) Prerequisite(s): 231 and 330 or permission of instructor.
ARTA 342 - Large Format Photography I (4) Studio course introducing theory and practice of photography using large format view camera.
(RE) Prerequisite(s): 231 and 330 or permission of instructor.

ARTA 360 - Printmaking Portfolio Review (0) Review of prior work in printmaking.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated once.
(RE) Prerequisite(s): 262 or 263 or 264 or 265 to 266 or 269 or 291 and Art History 172 or Art History 173.
Comment(s): Successful completion required prior to registration for 300-400 level courses.
ARTA 361 - Intermediate Print Workshop (4) Individual and collaborative studio work encompassing theory and practice in intaglio, lithography, relief printing, screenprinting, monoprint, papermaking, book arts, and/or photo-print processes.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 262 or 263 or 264 or 265 or 266 or 269.
ARTA 391 - Intermediate Two -Dimensional Arts (3-4) Individual sections for various artistic disciplines.
Repeatability: May be repeated. Maximum 8 hours.
Registration Restriction(s): Non-majors only (not for BA and BFA - studio art majors and BFA —graphic design majors).
Registration Permission: Consent of instructor.
ARTA 411 - Drawing IV (6) Advanced drawing with emphasis on individual concepts and personal expression.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 311.
Comment(s): Total of 12 hours required for students in the drawing concentration.
ARTA 413 - Painting IV (6) Advanced painting stressing individual concepts and personal expression with varied media.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 313.
Comment(s): Total of 12 hours required for students in the painting concentration.
ARTA 419 - Special Topics in Drawing and Painting (3) Student- or instructor-initiated course offered at convenience of department to enhance and expand the painting, drawing, and watercolor curriculum.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTA 431 - Photography III (4) Individual development of photographic problems and techniques.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 331.
ARTA 461 - Advanced Print Workshop (1-6) Individual and collaborative studio work encompassing theory and practice in intaglio, lithography, relief printing, screenprinting, monoprint, papermaking, book arts, and/or photo-print processes.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 361.
ARTA 469 - Special Topics in Printmaking (3-6) Student- or instructor-initiated course offered at convenience of department.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 361.
Comment(s): Or consent of instructor.
ARTA 493 - Independent Study (1-6)
Repeatability: May be repeated. Maximum 15 hours. Registration Permission: Consent of instructor.

ARTA 494 - Individual Problems (3)
Repeatability: May be repeated. Maximum 12 hours.
Registration Permission: Consent of instructor.
ARTA 495 - Visiting Artist Seminar (2) Study and discussion of contemporary art issues conducted by different visiting artists each semester.
Repeatability: May be repeated. Maximum 8 hours.
Credit Restriction: May not be applied toward the art history requirement.
ARTA 496 - Capstone (6) Students will engage in self-initiated research to demonstrate proficiency in two-dimensional arts. Registration Restriction(s): Minimum student level--senior.
Registration Permission: Consent of instructor.

## (ARTB) Art Three-Dimensional Arts

## ADD ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

ARTB 191 - Introduction to Studio Art: Various Media (3) Individual sections for various artistic disciplines.
Repeatability: Course may be repeated. Medium may not be repeated. Maximum 12 hours.
Registration Restriction(s): Non-majors only (not for BA and BFA - studio art majors and BFA - graphic design majors).
ARTB 221 - Ceramic Sculpture (3) Introduction to sculptural formats with a focus on ideas and ceramic process. This course will address clay preparation, clay finishing and kiln firing.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): Art 101 and 103.
(RE) Corequisite(s): Art 102.
Comment(s): Or consent of instructor.
ARTB 222 - Beginning Pottery (3) Introduction to clay with an emphasis on utilitarian form. This course will address pottery wheel techniques, clay preparation, glazing and kiln firing.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): Art 101 and 103.
(RE) Corequisite(s): Art 102.
Comment(s): Or consent of instructor.
ARTB 225 - Portfolio Practicum - Handbuilding (3) Intense post-introductory studio experience to develop work for application to 320 (Ceramics: Portfolio Review).
Registration Restriction(s): Studio art majors only.
Registration Permission: Consent of department.
ARTB 226 - Portfolio Practicum - Throwing (3) Intense post-introductory studio experience to develop work for application to 320 (Ceramics: Portfolio Review).
Registration Restriction(s): Studio art majors only.
Registration Permission: Consent of department.
ARTB 229 - Ceramics: Special Topics (3) Student- or instructor-initiated courses to be offered at convenience of department.
Repeatability: May be repeated. Maximum 12 hours.
Registration Permission: Consent of instructor.
ARTB 240 - Techniques and Tools (1) Introduction to the equipment in metal shop, wood shop, and foundry. Instruction includes shop safety, operation of tools, and handling of hazardous materials. All students must pass proficiency tests.

ARTB 241 - Beginning Sculpture (3) Introduction to the materials, concepts, technical processes, and history of sculpture.
Materials include wood, plaster, steel, and plastics.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTB 242 - Figuring the Body (3) Sculpture that involves the human figure, directly or indirectly. Issues relating to the body and personal identity will be explored through various media.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.

ARTB 243 - Mold-Making and Casting (3) Examines possibilities and processes related to mold-making. A variety of casting materials will be explored including metals, wax, rubber, plaster, and ceramic shell.
(RE) Prerequisite(s): 241.
ARTB 245 - Metal Fabrication (3) Introduction to steel as a material for the creation of sculpture. Development of welding techniques, design of cold connections, and engineering of structural components.
(RE) Prerequisite(s): 241.
ARTB 246 - Mixed Media Sculpture (3) Includes installation art, performance, and conceptual art. Contemporary issues and materials related to sculpture are examined through research and studio projects.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTB 249 - Special Topics in Sculpture (3) Instructor-initiated course offered at convenience of department.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): Art 101 and Art 103.
(RE) Corequisite(s): Art 102.
ARTB 320 - Ceramics: Portfolio Review (0) Review of prior work in ceramics.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated once.
(RE) Prerequisite(s): Art History 172 or Art History 173.
(RE) Corequisite(s): 221 and 222.
Comment(s): Successful completion required prior to registration for 300-400 level courses.
ARTB 321 - Intermediate Ceramic Sculpture (4) Continued investigation of handbuilding with an emphasis on the development of individual ideas and expression.
(RE) Prerequisite(s): 320.
ARTB 322 - Intermediate Pottery (4) Continued investigation of throwing with an emphasis on the development of individual ideas and expression.
(RE) Prerequisite(s): 320.
ARTB 323 - Intermediate Pottery and Ceramic Sculpture (4) Continued investigation of sculpture and/or utilitarian forms with an emphasis on idea development and process. This course will address clay preparation, clay finishing and kiln firing.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 221, 222, 320.
ARTB 340 - Sculpture Portfolio Review (0) Review of prior work in sculpture and development of new work.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated once.
(RE) Prerequisite(s): 241; two courses from Art History 172, 173, 162, 183.
Comment(s): Successful completion required prior to registration for 300-400 level courses.
ARTB 341 - Intermediate Sculpture (4) Students begin defining and developing their visual vocabulary relative to contemporary sculptural issues. Emphasis on studio projects, research, and discussion.
Repeatability: May be repeated. Maximum 8 hours.
(RE) Prerequisite(s): 245, 246, and 340.
ARTB 343 - Advanced Mold-Making and Casting (4) Further exploration of casting methods with an emphasis on metals including bronze and aluminum.
(RE) Prerequisite(s): 243 and 340.
ARTB 345 - Advanced Metal Fabrication (4) Advanced exploration of construction in steel and other metals through welding, design of cold connections, and engineering of structural components.
(RE) Prerequisite(s): 245 and 340.
ARTB 346 - Advanced Mixed Media Sculpture (4) Advanced investigation into the sculptural possibilities of installation art, performance, and multi-media. Contemporary issues are examined through research and studio projects.
(RE) Prerequisite(s): 246 and 340.
ARTB 391 - Intermediate Three-Dimensional Arts (3-4) Individual sections for various artistic disciplines.
Repeatability: May be repeated. Maximum 8 hours.
Registration Restriction(s): Non-majors only (not for BA and BFA - studio art majors and BFA -graphic design majors).

Registration Permission: Consent of instructor.
ARTB 421 - Advanced Ceramic Sculpture (6) Continued investigation of sculpture with a focus on idea development and individual direction. This course will address clay preparation, clay finishing and kiln firing.
Repeatability: May be repeated. Maximum 18 hours.
(RE) Prerequisite(s): 323.
ARTB 422 - Advanced Pottery (6) Continued investigation of utilitarian forms with a focus on idea development and individual direction. This course will address clay preparation, glazing and kiln firing.
Repeatability: May be repeated. Maximum 18 hours.
(RE) Prerequisite(s): 323.
ARTB 424 - Ceramics: Clays and Glazes (3) Clay chemistry, clay bodies, glaze theory, and calculation. Formulating, mixing, and testing of clay bodies and glaze formulas.
(RE) Prerequisite(s): 320.

ARTB 429 - Ceramics: Special Topics (3) Student- or instructor-initiated courses to be offered at convenience of department. Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 320.
ARTB 441 - Advanced Sculpture (6) Individual development of sculptural problems and techniques. Students work independently while participating in group projects, critique, and discussion.
Repeatability: May be repeated. Maximum 18 hours.
Recommended Background: 6 hours of 300 -level sculpture courses.
ARTB 442 - Senior Seminar (2) Investigation of professional practices and career opportunities in the field of sculpture. Includes portfolio development, preparation for exhibitions, and public commissions.

ARTB 449 - Special Topics in Sculpture (6) Student- or instructor-initiated course offered at convenience of department. Repeatability: May be repeated. Maximum 18 hours. Comment(s): Successful completion of any portfolio review required.

ARTB 493 - Independent Study (1-4)
Repeatability: May be repeated. Maximum 15 hours.
Registration Permission: Consent of instructor.
ARTB 494 - Individual Problems (3)
Repeatability: May be repeated. Maximum 12 hours.
Registration Permission: Consent of instructor.
ARTB 495 - Visiting Artist Seminar (2) Study and discussion of contemporary art issues conducted by different visiting artists each semester.
Repeatability: May be repeated. Maximum 8 hours.
Credit Restriction: May not be applied toward the art history requirement.
ARTB 496 - Capstone (6) Students will engage in self-initiated research to demonstrate proficiency in three-dimensional arts.
Registration Restriction(s): Minimum student level--senior.
Registration Permission: Consent of instructor.

## (ARTC) Art Four-Dimensional Arts

## ADD ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

ARTC 191 - Introduction to Studio Art: Various Media (3) Individual sections for various artistic disciplines.
Repeatability: Course may be repeated. Medium may not be repeated. Maximum 12 hours.
Registration Restriction(s): Non-majors only (not for BA and BFA - studio art majors and BFA - graphic design majors).
ARTC 232 - Introduction to Performance as Art (3) Development of basic concepts and techniques for the creation of performance as an art form.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): Art 101 and 103.
(RE) Corequisite(s): Art 102.

ARTC 234 - Introduction to Sound Art (3) Development of basic concepts and techniques for the creation of sound works as art forms.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): Art 101 and 103.
(RE) Corequisite(s): Art 102.
† ARTC 235 - Introduction to Cinematography as Art (3) Development of basic concepts and techniques for the creation of film as an art form. (Same as Cinema Studies 233.)
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): Art 101 and 103.
(RE) Corequisite(s): Art 102.
† ARTC 236 - Introduction to Video Art (3) Development of basic concepts and techniques for the creation of video works as an art form. (Same as Cinema Studies 234.)
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): Art 101 and 103.
(RE) Corequisite(s): Art 102.
ARTC 239 - Special Topics in Four -Dimensional Arts (3) Student- or instructor-initiated course offered at convenience of department.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): Art 101 and 103.
(RE) Corequisite(s): Art 102.

ARTC 330-4D Arts Concentration Progression Requirement Review (0) Review of prior work in four-dimensional arts.
Grading Restriction: Satisfactory/No Credit grading only.
(RE) Prerequisite(s): ARTC236 and 232 or 234 or 235 and Art History 172 and Art History 173 or 162 or 183.
Comment(s): Successful completion required prior to registration for junior and senior courses. See School of Art Handbook for details.

ARTC 391 - Intermediate Four-Dimensional Arts (3-4) Individual sections for various artistic disciplines.
Repeatability: May be repeated. Maximum 8 hours.
Registration Restriction(s): Non-majors only (not for BA and BFA — studio art majors and BFA —graphic design majors).
Registration Permission: Consent of instructor.
$\dagger$ ARTC 401 - Experiments in Sequencing (4) Advanced study and development of art or design works based on the concepts and techniques of sequencing. (Same as Art Design/Graphic 401.)
Repeatability: May be repeated. Maximum 16 hours.
Recommended Background: Any 4-D Arts course or Art Design/Graphic 405 or permission of the instructor.
$\dagger$ ARTC 402 - Experiments in Space (4) Advanced study and development of art or design works based on the concepts and techniques of spatiality. (Same as Art Design/Graphic 402.)
Repeatability: May be repeated. Maximum 16 hours.
Recommended Background: Any 4D Arts course or Art Design/Graphic 405 or permission of instructor.
$\dagger$ ARTC 403 - Experiments in Systems (4) Advanced study and development of art or design works based on systemic concepts and techniques. (Same as Art Design/Graphic 403.)
Repeatability: May be repeated. Maximum 16 hours.
Recommended Background: Any 4-D Arts course or Art Design/Graphic 405 or permission of the instructor.
ARTC 432 - Performance as Art (4) Advanced study and development of concepts and techniques for the creation of performance as an art form.
Repeatability: May be repeated. Maximum 16 hours.
(RE) Prerequisite(s): 232.
† ARTC 433 - History of Film and Modern and Contemporary Art (3) Study of the development and interaction between the cinematic arts and the visual arts within the context of 20th- and 21st-century art history. (Same as Cinema Studies 430.)
Comment(s): Available for art history credit.
ARTC 434 - Sound Art (4) Advanced study and development of concepts and techniques for the creation of sound art with a focus on multidisciplinary forms.
Repeatability: May be repeated. Maximum 16 hours.
(RE) Prerequisite(s): 234.
$\dagger$ ARTC 435 - Cinematography as Art (4) Continued development of concepts and techniques for the creation of film as an art form with an emphasis on individual projects. (Same as Cinema Studies 431.)
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 235.
† ARTC 436 - Video Art (4) Continued development of concepts and techniques for the creation of video works as an art form with an emphasis on individual projects. (Same as Cinema Studies 432.)
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 236.
ARTC 439 - Special Topics in Four-Dimensional Arts (3) Student- or instructor- initiated course offered at convenience of department.
Repeatability: May be repeated. Maximum 12 hours.

ARTC 450 - Senior Project (4) Students will engage in self-initiated productions to demonstrate proficiency in media art. Registration Restriction(s): Minimum student level - senior.

ARTC 493 - Independent Study (1-4)
Repeatability: May be repeated. Maximum 15 hours.
Registration Permission: Consent of instructor.
ARTC 494 - Individual Problems (3)
Repeatability: May be repeated. Maximum 12 hours.
Registration Permission: Consent of instructor.
ARTC 495 - Visiting Artist Seminar (3) Study and discussion of contemporary art issues conducted by different visiting artists each semester.
Repeatability: May be repeated. Maximum 12 hours.
Credit Restriction: May not be applied toward the art history requirement.
Registration Permission: Consent of instructor.

ARTC 496 - Capstone (6) Students will engage in self-initiated research to demonstrate proficiency in four-dimensional art. Registration Restriction(s): Minimum student level--senior.
Registration Permission: Consent of instructor.

## (ARTD) Art Design/Graphic

## ADD ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

ARTD 150 - The Idea of Graphic Design (3) An overview of design as visual message-making and as an act of cultural interpretation. Contemporary and historic design and its forms are examined, along with an introduction to design and creative concepts, and the role of criticism and theory.

ARTD 251 - Beginning Graphic Design I (3) Introduction to the elements and principles of graphic design including typography and layout. Survey of graphic design tools, materials, and processes. Emphasis on visual problem-solving.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): 150 and Art 101, Art 102, and Art 103.
ARTD 252 - Beginning Graphic Design II (3) Continuation of 251 and the exploration of the elements and principles of graphic design including typography and layout. Survey of graphic design tools, materials, and processes. Emphasis on visual problemsolving.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): 251 and 350.

ARTD 255 - Graphic Design Production (3) Traditional and computer-generated techniques for the production of print media in graphic design. Introduction to computer systems, software, and techniques.
(RE) Corequisite(s): 251.
ARTD 259 - Special Topics: Graphic Design (3) Student- or instructor-initiated course offered at discretion of department.

Repeatability: May be repeated. Maximum 12 hours.
Comment(s): Prerequisite(s) determined by department for individual topic.

ARTD 350 - Graphic Design Portfolio Review (0) Review of prior work in graphic design.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated once.
(RE) Corequisite(s): 251.
Comment(s): Successful completion required prior to registration for junior and senior courses. Successful completion of the General Education Culture and Civilizations Option 2 (completing a 2-course sequence in a foreign language at the intermediate level) required.

ARTD 351 - Intermediate Graphic Design I (4) Concept development and the study of graphic design elements including typography and imagery and their interrelationships within the graphic design layout.
(RE) Prerequisite(s): 252, 350.
(RE) Corequisite(s): 400.
ARTD 352 - Intermediate Graphic Design II (4) Investigation of sign, symbols, marks, and identity systems.
(RE) Prerequisite(s): 351.
(RE) Corequisite(s): 405.
ARTD 400 - Typography (3) Principles of typography, as well as classical and contemporary type forms, as vehicles for communication. An intensive introduction to the fundamentals of type, from individual letterforms to large bodies of textual information. Attention to formal, technological, rhetorical, and historical issues.
(RE) Prerequisite(s): 252 and 350.
(RE)Corequisite(s): 351.
† ARTD 401 - Experiments in Sequencing (4) (See Art Four-Dimensional Arts 401.)
† ARTD 402 - Experiments in Space (4) (See Art Four-Dimensional Arts 402.)
† ARTD 403 - Experiments in Systems (4) (See Art Four-Dimensional Arts 403.)

ARTD 405 - Computer Enhanced Graphic Design (3) Exploration of new technologies and their significance to graphic design.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 351 and 400.
(RE) Corequisite(s): 352.
ARTD 410 - Advanced Typographic Investigation (3) Expands on principles introduced in Typography (Art Design/Graphic 400). Projects will include work in reflective as well as electronic environments with an emphasis on personal exploration. (RE) Prerequisite(s): 400.

ARTD 425 - Illustration (3) Develops skills and critical analysis for effective visual communication. Projects will explore the relationship between image and meaning. Students will explore a variety of media as they develop a personal visual vocabulary. Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): Art 101, Art 102, and Art 103.
ARTD 444 - Graphic Design Center Practicum (3) Practical work experience in a student-managed, on-site studio.
Repeatability: May be repeated. Maximum 6 hours.
Registration Permission: Consent of instructor.
ARTD 450 - Design in Culture (3) A consideration of design as an act of cultural interpretation. Historic and contemporary design and design issues are examined through presentations, discussions, readings, and writings. Student assessment will come from writing, projects, presentations, and contributions to class discussion.

ARTD 451 - Advanced Graphic Design (4) Theory and techniques of visual problem-solving as applied to advanced applications of graphic design.
(RE) Prerequisite(s): 352.

* ARTD 452 - Graphic Design Seminar (4) Discussion of design and professional issues including politics, economics, and ethics for the graphic designer. Culminates in a student-initiated project.
Satisfies General Education Requirement: (OC)
(RE) Prerequisite(s): 451.

ARTD 455 - Graphic Design Professional Seminar (3) Professional practices including client relationships, design management, and business practices. Assembly, organization, and editing of the professional portfolio.
(RE) Corequisite(s): 452.

ARTD 456 - Graphic Design Practicum (1-12) Practical work experience in the graphic design field. Must be pre-arranged with the department.
Repeatability: May be repeated. Maximum 12 hours.
(RE) Prerequisite(s): 351 and 356.

ARTD 459 - Special Topics in Graphic Design (3) Student- or instructor- initiated course offered at discretion of department.
Repeatability: May be repeated. Maximum 12 hours.
Registration Permission: Consent of instructor.
ARTD 493 - Independent Study (1-6)
Repeatability: May be repeated. Maximum 12 hours.
Registration Permission: Consent of instructor.
ARTD 494 - Individual Problems (3)
Repeatability: May be repeated. Maximum 12 hours.
Registration Permission: Consent of instructor.
ARTD 495 - Visiting Artist Seminar (2) Study and discussion of contemporary art issues conducted by different visiting artists each semester.
Repeatability: May be repeated. Maximum 8 hours.
Credit Restriction: May not be applied toward the art history requirement.
Registration Permission: Consent of instructor.

## (ARTH) Art History

## ADD ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

米† ARTH 162 - Art of Africa, Oceania, and pre-Columbian America (3) Survey of the traditional arts of the cultures of Black Africa, the Pacific and the Americas (focusing primarily on the period before the European conquest). Sculpture, painting, pottery, textiles, architecture and human adornment will all be examined. (Same as Africana Studies 160.)
Satisfies General Education Requirement (AH)
*ARTH 167 - Honors: Art of Africa, Oceania, and Pre-Columbian America (3) Consent of instructor required. Survey of the traditional arts of the cultures of Black Africa, the Pacific and the Americas. Study grounded in reading, writing and discussion. Writing-emphasis course.
Satisfies General Education Requirement (AH)
米ARTH 172 - Western Art I (3) Major monuments in western art with emphasis on Europe from prehistory through the Middle Ages.
Contact Hour Distribution: 2-hour lecture and 1-hour discussion each week.
Satisfies General Education Requirement (AH)
*ARTH 173 - Western Art II (3) Major monuments in the history of European and American art from the Renaissance to the present.
Contact Hour Distribution: 2-hour lecture and 1-hour discussion each week.
Satisfies General Education Requirement (AH)

* ARTH 177 - Honors: Western Art I (3) Consent of Department required. Major monuments in western art with emphasis on Europe from prehistory through the Middle Ages. Study grounded in reading, writing, and discussion. Writing-emphasis course. Satisfies General Education Requirement (AH)
* ARTH 178 - Honors: Western Art II (3) Consent of Department required. Major monuments in the history of European and American art from the Renaissance to the present. Study grounded in reading, writing, and discussion. Writing-emphasis course. Satisfies General Education Requirement (AH)
* ARTH 183-Asian Art (3) Selected works of painting, sculpture, architecture, and other forms in India, China, Japan, and to a lesser extent, Korea and Southeast Asia from antiquity through the 19th century.


## Satisfies General Education Requirement (AH)

* ARTH 187 - Honors: Asian Art (3) Consent of instructor required. Selected works of painting, sculpture, architecture and other forms in India, China, Japan, Korea and Southeast Asia, from antiquity through the 19th century. Study grounded in reading, writing, and discussion. Writing-emphasis course.
Satisfies General Education Requirement (AH)

ARTH 279 - Special Topics in Art History (3) Student- or instructor-initiated course offered at convenience of department Repeatability: May be repeated. Maximum 12 hours.

ARTH 375 - Seminar in Art History I (3) Seminar for majors. Introduction to the practice and methodology of art history. Writingemphasis course.
Recommended Background: 9 hours of art history courses, 3 of which must be upper-division.

* ARTH 402 - Seminar in Art History II (3) Seminar for majors. Builds on 375 but with an emphasis on research and effective written and oral presentation. Capstone class.
Satisfies General Education Requirement (WC)
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): 375.
Registration Restriction(s): Minimum student level - junior.
ARTH 403 - History of Photography (3) Survey of the history of photography from the introduction of the daguerreotype and calotype to more recent trends. Emphasis will be placed on aesthetics and the use of photography as a medium for artistic expression.

ARTH 411 - Art of South and Southeast Asia (3) Survey of the art and architecture of the Indian subcontinent and Southeast Asia from 2000 BC to the 20th century. The major achievements of each period are examined in relation to their religious, political, and social contexts. Writing-emphasis course.

ARTH 413-Art of China I (3) Survey of the art and architecture of China from the Neolithic period through the Song dynasty (9681279). The major achievements of each period are examined in relation to their religious, political, and social contexts. Writingemphasis course.

ARTH 414 - Art of China II (3) Survey of the art and architecture of China from the Yuan period through the Qing dynasties (16441911). The major achievements of each period are examined in relation to their religious, political, and social contexts. Writingemphasis course.

ARTH 416 - Chinese Art of the 20th and 21st Centuries (3) Survey of Chinese art from the late 19th century through the present. Hong Kong, Taiwanese, and expatriate artists are also considered. Writing-emphasis course.

ARTH 419 - Art of Japan (3) Survey of the art and architecture of Japan from the Neolithic period to the 20th century. The major achievements of each period are examined in relation to their religious, political, and social contexts. Writing-emphasis course.
† ARTH 425 - Early Christian and Byzantine Art to 1350 (3) Art in Italy and the Eastern Empire from the beginnings of Christian art to c. 1350. Mosaic and painting, sculpture and architecture. Writing-emphasis course. (Same as Judaic Studies 426.)
† ARTH 431 - Medieval Art of the West, 800-1400 (3) Western European art of the Dark Ages, Romanesque, and Gothic periods. Writing-emphasis course. (Same as Judaic Studies 432; Medieval Studies 432.)
$\dagger$ ARTH 441 - Northern European Painting, 1350-1600 (3) From courtly art of late Middle Ages to Northern Renaissance. Jan van Eyck, Roger van der Weyden, and Dürer; early printmakers. Writing-emphasis course. (Same as Medieval Studies 442.)

ARTH 442 - Art of Northern Europe, 1600-1675 (3) Concentrated study of Bruegel, Rubens, Rembrandt, Georges de La Tour, Vermeer, Poussin, and Hals. Writing-emphasis course.
† ARTH 451 - The Art of Italy, 1250-1450 (3) Development of exploration of naturalism. Revival of antiquity and development of theories of perspective in the Early Renaissance. Including Duccio, Giotto, Masaccio, Donatello, Botticelli. Writing-emphasis course. (Same as Medieval Studies 452.)

ARTH 452 - Art of Italy, 1450-1575 (3) Concentrated study of Leonardo da Vinci, Michelangelo, Titian, Raphael, Pontormo, and Giorgione. Writing-emphasis course.

ARTH 453 - Art of Southern Europe, 1575-1700 (3) Concentrated study of Caravaggio, Bernini, and Italian Baroque developments in all media. Spanish Baroque painting and sculpture with special attention to Velazquez. Writing-emphasis course.

ARTH 454 - Renaissance and Baroque Theory (3) Addresses the theory of Western art in the early modern period with emphasis on the development and evolution in European art during the Renaissance and Baroque periods. Writing-emphasis course. (RE) Prerequisite(s): 172 and 173.
† ARTH 461-Art of Southern and Eastern Africa (3) Art traditions of the eastern and southern regions of Africa. Sculpture, painting, pottery, textiles, architecture, and human adornment will be examined. Some ancient Stone and Iron Age traditions will be examined, but the main emphasis will be on the diverse ethnic and regional art traditions practiced in the area from the 19th century to the present. Writing-emphasis course. (Same as Africana Studies 464.)
† ARTH 462 - Art and Archaeology of Ancient Africa (3) Historical art traditions of sub-Sahara Africa. Topics to be covered include prehistoric rock paintings, art from archaeological sites and ancient kingdoms. The time period covered ranges from the first and second millennia $B C$ for some of the early terracotta sculpture and rock paintings, the 11th through 19th centuries $A D$ for the later ancient kingdoms. Writing-emphasis course. (Same as Africana Studies 465.)
† ARTH 463-Arts of the African Diaspora (3) Examines the aesthetic, philosophical and religious patterns of the African descendants of Brazil, Surinam, the Caribbean and the United States. Emphasis will be placed on the full range of art forms, including the sculptural and performance traditions, as well as architecture, textile, basketry, and pottery art forms. Writing-emphasis course. (Same as Africana Studies 466.)

ARTH 464 - Oceanic Art (3) Concentrated study of selected sculpture, textiles, architecture and other traditional art forms of Polynesia, Micronesia, and Melanesia. Objects are discussed on the basis of style, style relationship, iconography and the uses to which they were put in their traditional religious, political, and social contexts. Writing-emphasis course.
† ARTH 470 - African-American Art (3) Traces the artistic and social legacy of African-American art from the eighteenth century to the present day. Specifically, this class will focus on the ways in which artists used creativity to confront, deny, or complicate understandings of racial identity and racism. Examines broad scope of artistic production including painting, sculpture, photography, multi-media, fiction writing, and video art. Writing-emphasis course. (Same as Africana Studies 471.)

ARTH 472 - History of 20th-Century American Art (3) Developments in architecture, painting, and design from 1900. Writingemphasis course.

ARTH 473-19th-Century American Art (3) Examines painting, sculpture, and print culture from the Revolutionary War to the turn of the 20th century. Writing-emphasis course.

ARTH 475 - History of 19th-Century Painting and Sculpture in Europe (3) The evolution of Romanticism, Neoclassicism, and Realism in Europe, including the innovations of Manet, Impressionism, Cezanne, Post-Impressionism, Art Nouveau, and Symbolism. Writing-emphasis course.

ARTH 476 - History of 20th-Century Painting and Sculpture in Europe (3) Development of the Modern and Post-Modern movements in Europe. Investigation of the progression of abstraction through more recent conceptual trends. Analysis of the work of individual artists such as Picasso, Matisse, and many others. Writing-emphasis course.

ARTH 479 - Special Topics in Art History (3) Student- or instructor-initiated course offered at convenience of department. Repeatability: May be repeated. Maximum 12 hours.

ARTH 489 - Studies in Art History (3) Concentration in individually selected area.
Repeatability: May be repeated. Maximum 6 hours.
Registration Permission: Consent of instructor.

## ARTH 493 - Independent Study (1-3)

Repeatability: May be repeated. Maximum 9 hours. Registration Permission: Consent of instructor.

Repeatability: May be repeated. Maximum 12 hours. Registration Permission: Consent of instructor.

Equivalency Table

| Current Courses Art Ceramics (ACER) | Equivalent Courses Effective Fall 2011 Art Three-Dimensional Arts (ARTB) |
| :---: | :---: |
| ACER 191 - Introduction to Studio Art: Various Media | ARTB 191 - Introduction to Studio Art: Various Media |
| ACER 221 - Ceramic Sculpture | ARTB 221 - Ceramic Sculpture |
| ACER 222 - Beginning Pottery | ARTB 222 - Beginning Pottery |
| ACER 225 - Portfolio Practicum - Handbuilding | ARTB 225 - Portfolio Practicum - Handbuilding |
| ACER 226 - Portfolio Practicum - Throwing | ARTB 226 - Portfolio Practicum - Throwing |
| ACER 229 - Ceramics: Special Topics | ARTB 229 - Ceramics: Special Topics |
| ACER 320-Ceramics: Portfolio Review | ARTB 320-Ceramics: Portfolio Review |
| ACER 321 - Ceramics: Handbuilding II | ARTB 321 - Intermediate Ceramic Sculpture |
| ACER 322 - Ceramics: Throwing II | ARTB 322 - Intermediate Pottery |
| ACER 323 - Intermediate Pottery and Ceramic Sculpture | ARTB 323 - Intermediate Pottery and Ceramic Sculpture |
| ACER 391 - Intermediate Ceramics | ARTB 391 - Intermediate Three-Dimensional Arts |
| ACER 421 - Advanced Ceramic Sculpture | ARTB 421 - Advanced Ceramic Sculpture |
| ACER 422 - Advanced Pottery | ARTB 422 - Advanced Pottery |
| ACER 424 - Ceramics: Clays and Glazes | ARTB 424 - Ceramics: Clays and Glazes |
| ACER 429 - Ceramics: Special Topics | ARTB 429-Ceramics: Special Topics |
| ACER 493 - Independent Study | ARTB 493 - Independent Study |
| ACER 494 - Individual Problems | ARTB 494 - Individual Problems |
| ACER 495-Visiting Artist Seminar | ARTB 495 - Visiting Artist Seminar |
| ACER 496 - Capstone | ARTB 496 - Capstone |
| Current Courses <br> Art Design/Graphic (ADES) | Equivalent Courses Effective Fall 2011 Art Design/Graphic (ARTD) |
| ADES 150 - The Idea of Graphic Design | ARTD 150 - The Idea of Graphic Design |
| ADES 251 - Beginning Graphic Design I | ARTD 251 - Beginning Graphic Design I |
| ADES 252 - Beginning Graphic Design II | ARTD 252 - Beginning Graphic Design II |
| ADES 255-Graphic Design Production | ARTD 255 - Graphic Design Production |
| ADES 259 - Special Topics: Graphic Design | ARTD 259 - Special Topics: Graphic Design |
| ADES 350-Graphic Design Portfolio Review | ARTD 350 - Graphic Design Portfolio Review |
| ADES 351 - Intermediate Graphic Design I | ARTD 351 - Intermediate Graphic Design I |
| ADES 352 - Intermediate Graphic Design II | ARTD 352 - Intermediate Graphic Design II |
| ADES 400-Typography | ARTD 400-Typography |
| ADES 401 - Experiments in Sequencing | ARTD 401 - Experiments in Sequencing |
| ADES 402 - Experiments in Space | ARTD 402 - Experiments in Space |
| ADES 403 - Experiments in Systems | ARTD 403 - Experiments in Systems |
| ADES 405 - Computer Enhanced Graphic Design | ARTD 405 - Computer Enhanced Graphic Design |
| ADES 410 - Advanced Typographic Investigation | ARTD 410-Advanced Typographic Investigation |
| ADES 425 - Illustration | ARTD 425 - Illustration |
| ADES 444-Graphic Design Center Practicum | ARTD 444 - Graphic Design Center Practicum |
| ADES 450 - Design in Culture | ARTD 450 - Design in Culture |
| ADES 451 - Advanced Graphic Design | ARTD 451 - Advanced Graphic Design |
| ADES 452-Graphic Design Seminar | ARTD 452 - Graphic Design Seminar |
| ADES 455-Graphic Design Professional Seminar | ARTD 455-Graphic Design Professional Seminar |
| ADES 456 - Graphic Design Practicum | ARTD 456 - Graphic Design Practicum |
| ADES 459- Special Topics in Graphic Design | ARTD 459 - Special Topics in Graphic Design |
| ADES 493 - Independent Study | ARTD 493 - Independent Study |
| ADES 495-Visiting Artist Seminar | ARTD 495 - Visiting Artist Seminar |
| Current Courses <br> Art Drawing (ADRA) | Equivalent Courses Effective Fall 2011 Art Two-Dimensional Arts (ARTA) |
| ADRA 191 - Introduction to Studio Art: Various Media | ARTA 191 - Introduction to Studio Art: Various Media |
| ADRA 211 - Drawing I | ARTA 211 - Drawing I |
| ADRA 212 - Drawing II | ARTA 212 - Drawing II |


| ADRA 219-Special Topics in Drawing/Painting | ARTA 219-Special Topics in Drawing/Painting |
| :---: | :---: |
| ADRA 311 - Drawing III | ARTA 311 - Drawing III |
| ADRA 312 - Drawing Portfolio Review | ARTA 312 - Drawing Portfolio Review |
| ADRA 391 - Intermediate Drawing | ARTA 391 - Intermediate Two-Dimensional Arts |
| ADRA 411 - Drawing IV | ARTA 411 - Drawing IV |
| ADRA 419-Special Topics in Drawing and Painting | ARTA 419-Special Topics in Drawing and Painting |
| ADRA 493 - Independent Study | ARTA 493 - Independent Study |
| ADRA 494 - Individual Problems | ARTA 494-Individual Problems |
| ADRA 495 - Visiting Artist Seminar | ARTA 495 - Visiting Artist Seminar |
| ADRA 496 - Capstone | ARTA 496 - Capstone |
| Current Courses Art History (AHIS) | Equivalent Courses Effective Fall 2011 Art History (ARTH) |
| AHIS 162 - Art of Africa, Oceania, and Pre-Columbian America | ARTH 162 - Art of Africa, Oceania, and Pre-Columbian America |
| AHIS 167 - Honors: Art of Africa, Oceania, and PreColumbian America | ARTH 167 - Honors: Art of Africa, Oceania, and PreColumbian America |
| AHIS 172 - Western Art I | ARTH 172 - Western Art I |
| AHIS 173-Western Art II | ARTH 173-Western Art II |
| AHIS 177 - Honors: Western Art I | ARTH 177 - Honors: Western Art I |
| AHIS 178 - Honors: Western Art II | ARTH 178 - Honors: Western Art II |
| AHIS 183-Asian Art | ARTH 183 - Asian Art |
| AHIS 187 - Honors: Asian Art | ARTH 187 - Honors: Asian Art |
| AHIS 279 - Special Topics in Art History | ARTH 279 - Special Topics in Art History |
| AHIS 375 - Seminar in Art History I | ARTH 375 - Seminar in Art History I |
| AHIS 402 - Seminar in Art History II | ARTH 402 - Seminar in Art History II |
| AHIS 403-History of Photography | ARTH 403 - History of Photography |
| AHIS 411 - Art of South and Southeast Asia | ARTH 411 - Art of South and Southeast Asia |
| AHIS 415-Art of China | ARTH 413-Art of China I |
|  | ARTH 414 - Art of China II |
| AHIS 416 - Chinese Art of the 20th and 21st Centuries | ARTH 416 - Chinese Art of the 20th and 21st Centuries |
| AHIS 419 - Art of Japan | ARTH 419 - Art of Japan |
| AHIS 425 - Early Christian and Byzantine Art to 1350 | ARTH 425 - Early Christian and Byzantine Art to 1350 |
| AHIS 431-Medieval Art of the West, 800-1400 | ARTH 431-Medieval Art of the West, 800-1400 |
| AHIS 441 - Northern European Painting, 1350-1600 | ARTH 441 - Northern European Painting, 1350-1600 |
| AHIS 442-Art of Northern Europe, 1600-1675 | ARTH 442 - Art of Northern Europe, 1600-1675 |
| AHIS 451 - The Art of Italy, 1250-1450 | ARTH 451 - The Art of Italy, 1250-1450 |
| AHIS 452-Art of Italy, 1450-1575 | ARTH 452 - Art of Italy, 1450-1575 |
| AHIS 453 - Art of Southern Europe, 1575-1700 | ARTH 453 - Art of Southern Europe, 1575-1700 |
| AHIS 454 - Renaissance and Baroque Theory | ARTH 454 - Renaissance and Baroque Theory |
| AHIS 461 - Art of Southern and Eastern Africa | ARTH 461 - Art of Southern and Eastern Africa |
| AHIS 462 - Art and Archaeology of Ancient Africa | ARTH 462 - Art and Archaeology of Ancient Africa |
| AHIS 463 - Arts of the African Diaspora | ARTH 463 - Arts of the African Diaspora |
| AHIS 464-Oceanic Art | ARTH 464-Oceanic Art |
| AHIS 470-African-American Art | ARTH 470 - African-American Art |
| AHIS 472 - History of 20th-Century American Art | ARTH 472 - History of 20th-Century American Art |
| AHIS 473-19th-Century American Art | ARTH 473-19th-Century American Art |
| AHIS 475 - History of 19th-Century Painting and Sculpture in Europe | ARTH 475 - History of 19th-Century Painting and Sculpture in Europe |
| AHIS 476 - History of 20th-Century Painting and Sculpture in Europe | ARTH 476 - History of 20th-Century Painting and Sculpture in Europe |
| AHIS 479 - Special Topics in Art History | ARTH 479 - Special Topics in Art History |
| AHIS 489-Studies in Art History | ARTH 489 - Studies in Art History |
| AHIS 493 - Independent Study | ARTH 493 - Independent Study |
| AHIS 494 - Individual Problems | ARTH 494 - Individual Problems |
| Current Courses <br> Art Media Arts (AMED) | Equivalent Courses Effective Fall 2011 <br> Art Four-Dimensional Arts (ARTC) |
| AMED 191 - Introduction to Studio Art: Various Media | ARTC 191 - Introduction to Studio Art: Various Media |


| AMED 232 - Introduction to Performance as Art | ARTC 232 - Introduction to Performance as Art |
| :---: | :---: |
| AMED 234 - Introduction to Sound Art | ARTC 234 - Introduction to Sound Art |
| AMED 235 - Introduction to Cinematography as Art | ARTC 235 - Introduction to Cinematography as Art |
| AMED 236 - Introduction to Video Art | ARTC 236 - Introduction to Video Art |
| AMED 239 - Special Topics in Media Arts | ARTC 239-Special Topics in Four-Dimensional Arts |
| AMED 330-Media Arts Portfolio Review | ARTC 330-4D Arts Concentration Progression Requirement Review |
| AMED 391 - Intermediate Media | ARTC 391 - Intermediate Four-Dimensional Arts |
| AMED 401 - Experiments in Sequencing | ARTC 401 - Experiments in Sequencing |
| AMED 402 - Experiments in Space | ARTC 402 - Experiments in Space |
| AMED 403 - Experiments in Systems | ARTC 403 - Experiments in Systems |
| AMED 432 - Performance as Art | ARTC 432 - Performance as Art |
| AMED 433 - History of Film and Modern and Contemporary Art | ARTC 433 - History of Film and Modern and Contemporary Art |
| AMED 434 - Sound Art | ARTC 434 - Sound Art |
| AMED 435 - Cinematography as Art | ARTC 435-Cinematography as Art |
| AMED 436 - Video Art | ARTC 436 - Video Art |
| AMED 439 - Special Topics in Media Arts | ARTC 439-Special Topics in Four-Dimensional Arts |
| AMED 450 - Senior Project | ARTC 450-Senior Project |
| AMED 493 - Independent Study | ARTC 493 - Independent Study |
| AMED 494 - Individual Problems | ARTC 494-Individual Problems |
| AMED 495-Visiting Artist Seminar | ARTC 495-Visiting Artist Seminar |
| AMED 496 - Capstone | ARTC 496 - Capstone |
| Current Courses Art Media Arts (AMED) | Equivalent Courses Effective Fall 2011 <br> Art Two-Dimensional Arts (ARTA) |
| AMED 231 - Photography I | ARTA 231 - Photography I |
| AMED 331 - Photography II | ARTA 331 - Photography II |
| AMED 341 - Digital Photography | ARTA 341 - Digital Photography |
| AMED 342 - Large Format Photography I | ARTA 342 - Large Format Photography I |
| AMED 431 - Photography III | ARTA 431 - Photography III |
| Current Courses Art Painting (APAI) | Equivalent Courses Effective Fall 2011 <br> Art Two-Dimensional Arts (ARTA) |
| APAI 191 - Introduction to Studio Art: Various Media | ARTA 191 - Introduction to Studio Art: Various Media |
| APAI 213 - Painting I: Introduction | ARTA 213 - Painting I: Introduction |
| APAI 214 - Painting II | ARTA 214 - Painting II |
| APAI 215 - Watercolor I: Introduction | ARTA 215 - Watercolor I: Introduction |
| APAI 216 - Watercolor II | ARTA 216 - Watercolor II |
| APAI 219-Special Topics in Drawing/Painting | ARTA 219-Special Topics in Drawing/Painting |
| APAI 313 - Painting III | ARTA 313 - Painting III |
| APAI 314 - Painting Portfolio Review | ARTA 314 - Painting Portfolio Review |
| APAI 391 - Intermediate Painting | ARTA 391 - Intermediate Two-Dimensional Arts |
| APAI 413 - Painting IV | ARTA 413 - Painting IV |
| APAI 419-Special Topics in Drawing and Painting | ARTA 419-Special Topics in Drawing and Painting |
| APAI 493 - Independent Study | ARTA 493 - Independent Study |
| APAI 494 - Individual Problems | ARTA 494 - Individual Problems |
| APAI 495 - Visiting Artist Seminar | ARTA 495 - Visiting Artist Seminar |
| APAI 496 - Capstone | ARTA 496 - Capstone |
| Current Courses <br> Art Printmaking (APRI) | Equivalent Courses Effective Fall 2011 <br> Art Two-Dimensional Arts (ARTA) |
| APRI 262 - Intaglio I | ARTA 262 - Intaglio I |
| APRI 263 - Lithography I | ARTA 263 - Lithography I |
| APRI 264 - Screen Printing I | ARTA 264 - Screen Printing I |
| APRI 265 - Relief | ARTA 265 - Relief |
| APRI 266 - Monoprint and Monotype | ARTA 266 - Monoprint and Monotype |
| APRI 269 - Special Topics in Printmaking | ARTA 269-Special Topics in Printmaking |
| APRI 291 - Papermaking Workshop | ARTA 291 - Papermaking Workshop |
| APRI 360 - Printmaking Portfolio Review | ARTA 360 - Printmaking Portfolio Review |


| APRI 361 - Intermediate Print Workshop | ARTA 361 - Intermediate Print Workshop |
| :---: | :---: |
| APRI 391 - Intermediate Printmaking | ARTA 391 - Intermediate Two-Dimensional Arts |
| APRI 461 - Advanced Print Workshop | ARTA 461 - Advanced Print Workshop |
| APRI 469-Special Topics in Printmaking | ARTA 469-Special Topics in Printmaking |
| APRI 493 - Independent Study | ARTA 493 - Independent Study |
| APRI 494 - Individual Problems | ARTA 494 - Individual Problems |
| APRI 495 - Visiting Artist Seminar | ARTA 495 - Visiting Artist Seminar |
| APRI 496 - Capstone | ARTA 496 - Capstone |
| Current Courses Art Sculpture (ASCU) | Equivalent Courses Effective Fall 2011 Art Three-Dimensional Arts (ARTB) |
| ASCU 191 - Introduction to Studio Art: Various Media | ARTB 191 - Introduction to Studio Art: Various Media |
| ASCU 240 - Techniques and Tools | ARTB 240-Techniques and Tools |
| ASCU 241 - Beginning Sculpture | ARTB 241 - Beginning Sculpture |
| ASCU 242 - Figuring the Body | ARTB 242 - Figuring the Body |
| ASCU 243 - Mold-Making and Casting | ARTB 243-Mold-Making and Casting |
| ASCU 245 - Metal Fabrication | ARTB 245 - Metal Fabrication |
| ASCU 246 - Mixed Media Sculpture | ARTB 246 - Mixed Media Sculpture |
| ASCU 249 - Special Topics in Sculpture | ARTB 249 - Special Topics in Sculpture |
| ASCU 340 - Sculpture Portfolio Review | ARTB 340 - Sculpture Portfolio Review |
| ASCU 341 - Intermediate Sculpture | ARTB 341 - Intermediate Sculpture |
| ASCU 343 - Advanced Mold-Making and Casting | ARTB 343 - Advanced Mold-Making and Casting |
| ASCU 345 - Advanced Metal Fabrication | ARTB 345-Advanced Metal Fabrication |
| ASCU 346 - Advanced Mixed Media Sculpture | ARTB 346 - Advanced Mixed Media Sculpture |
| ASCU 391 - Intermediate Sculpture | ARTB 391 - Intermediate Three-Dimensional Arts |
| ASCU 441 - Advanced Sculpture | ARTB 441 - Advanced Sculpture |
| ASCU 442 - Senior Seminar | ARTB 442-Senior Seminar |
| ASCU 449-Special Topics in Sculpture | ARTB 449-Special Topics in Sculpture |
| ASCU 493 - Independent Study | ARTB 493 - Independent Study |
| ASCU 494 - Individual Problems | ARTB 494 - Individual Problems |
| ASCU 495 - Visiting Artist Seminar | ARTB 495 - Visiting Artist Seminar |
| ASCU 496 - Capstone | ARTB 496 - Capstone |

## DEPARTMENT OF BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY

## (188) (BCMB) Biochemistry and Cellular and Molecular Biology

ADD (SECONDARY CROSS-LIST)
†482 Physiology of Exercise (3) (See Kinesiology 480.).

## DEPARTMENT OF CLASSICS

## (257) (CLAS) Classics

ADD
461 Special Topics in Classical Archaeology (3) Topics in the archaeology of Greece and Rome.
Repeatability: May be repeated. Maximum 9 hours.

## $\dagger$ ADD PRIMARY CROSS-LIST (TO EXISTING COURSE)

384 Gender and Sexuality in Ancient Rome (3) Examines the Roman view of gender roles and sexuality. Evidence from literature, epigraphy, and material culture is used to consider what the ideals of behavior were for Roman women and men, what constituted deviation from these ideals, and how "real" Romans may actually have behaved. Writing-emphasis course. (Same as Women's Studies 384.)

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REVISE (RE) PREREQUISITE
431 Selected Readings from Latin Literature (3)
(RE) Prerequisite(s): }252
Formerly: (RE) Prerequisite(s): 351 or 352.
432 Selected Readings from Latin Literature (3)
(RE) Prerequisite(s): }252
Formerly: (RE) Prerequisite(s): 351 or 352.
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# DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY 

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(278) (EEB) Ecology and Evolutionary Biology
ADD (SECONDARY CROSS-LIST)
\(\dagger 406\) Models in Biology (3) (See Mathematics 405.).
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ADD
424 Plant Diversity and Evolution (3) A survey of the evolutionary history of photosynthetic cyanobacteria and green plants (green algae, bryophytes, lycophytes, ferns and seed plants). A hands-on laboratory provides an in-depth understanding of major morphological and developmental features of each group.
Contact hour distribution 2 hours lecture, 1 two hour lab.
(RE) Prerequisite(s): Biology 102 or Biology 111 or Biology 130.

DROP
410 Plant Evolutionary Morphology (4)
Equivalency Table

| Current Course <br> Ecology and Evolutionary Biology (EEB) | Equivalent Course Effective Fall 2011 <br> Ecology and Evolutionary Biology (EEB) |
| :---: | :---: |
| 410 | 424 |

## DEPARTMENT OF ENGLISH

## (339) (ENGL) English

## REVISE DESCRIPTION, REVISE CREDIT RESTRICTION, REVISE (RE) COREQUISITE

104 Writing Workshop II (1) Self-paced Writing Center tutorial for students wanting additional instruction while enrolled in English 102 or 118 or students advised to enroll by their 102 or 118 instructors. Individual instruction in critical reading and in developing and documenting the research paper.
Credit Restriction: To receive credit, students must participate at least two hours per week and must also pass the 102 or 118 class
in which they are currently enrolled.
(RE) Corequisite(s): 102 or 118.
Formerly: Self-paced Writing Center tutorial for students wanting additional instruction while enrolled in English 102 or students advised to enroll by their 102 instructors. Individual instruction in critical reading and in developing and documenting the research paper.
Credit Restriction: To receive credit, students must participate at least two hours per week and must also pass the 102 class in which they are currently enrolled.
(RE) Corequisite(s): 102.

## REVISE DESCRIPTION (ADD WRITING-EMPHASIS)

$\dagger 381$ American Tales, Songs, and Material Culture: An Introduction to Folklore (3) Modern folklore/folk-life studies. Emphasis upon folktale, tall tale, myth, legend, folk balladry and music, proverbs, riddles, superstitions, games, food, crafts, art, and architecture. Writing-emphasis course. (Same as American Studies 381.)

Formerly: Modern folklore/folk-life studies. Emphasis upon folktale, tall tale, myth, legend, folk balladry and music, proverbs, riddles, superstitions, games, food, crafts, art, and architecture. (Same as American Studies 381.)

DROP (RE) PREREQUISITE, ADD RECOMMENDED BACKGROUND:
$\dagger 472$ American English (3)
Recommended Background: 371, 372, or Linguistics 200, or consent of instructor.
Formerly: (RE) Prerequisite 371 or 372 or Linguistics 200.

## DEPARTMENT OF GEOGRAPHY

## (415) (GEOG) Geography

## ADD

*137 Honors: Geography of the Natural Environment I (4) Honors-level introduction to physical geography, emphasizing characteristics and processes of the earth's surface and lower atmosphere and their interaction to produce a world pattern of distinctive environments significant to humanity. Covers elements and controls of climate, atmospheric circulation, precipitation and storms, the hydrological cycle, world climate and vegetation patterns, and climate change.

## Satisfies General Education Requirement (NS)

Contact Hour Distribution: 3 hours lecture, 2 hours lab, and 1 hour discussion.
Credit Restriction: Students may not receive credit for both 131 and 137.

375 Geography of South Asia (3) Physical, Cultural, and economic geography of India and its neighbors. Writing-emphasis course.

445 Cities in a World System (3) Urban centers in developed and developing countries, global cities, tourist and other specialized cities, and comparative urbanism. Writing-emphasis course.

## REVISE DESCRIPTION, DROP (RE) PREREQUISITE, ADD RECOMMENDED BACKGROUND

454 Terrain Analysis (3) Generation, analysis, and application of digital elevation/terrain data. Specific topics include GIS-based terrain data models, terrain surface parameter extraction, profile analysis, viewshed and shielding analysis, and watershed delineation.
Recommended Background: GIS course and introductory physical geography or geology.
Formerly: Analysis of landscape history from digital elevation datasets and traditional topographic maps. Basement materials and structures. Erosional and depositional evidence, including fluvial, glacial, Aeolian, and shoreline features of past climatic and biological regimes.
(RE) Prerequisite(s): 123 or Geology 101-102 or Geology 107-108.

## DEPARTMENT OF INTERDISCIPLINARY PROGRAMS

(581) (INPG) Interdisciplinary Programs

## ADD

110 VolsTeach: Inquiry-Based Approaches to Teaching (1) Introduction to inquiry-based approaches to teaching in mathematics and science.
Contact Hour Distribution: one 1-hour laboratory per week and five field experiences per semester in elementary schools. Grading Restriction: A, B, C, No Credit.

120 VolsTeach: Inquiry-Based Lesson Design (1) Introduction to inquiry-based lesson design in mathematics and science. Contact Hour Distribution: one 1-hour laboratory per week and four field experiences per semester in middle schools.
Grading Restriction: A, B, C, No Credit.
(RE) Prerequisite(s): INPG 110 with a grade of B- or better, or permission of instructor.
385 VolsTeach: Research Methods in Science (3) Inquiry-based teaching methods in science. Students perform independent inquiries and learn to combine skills from mathematics and science to solve research problems. A component of the VolsTeach curriculum.
Contact Hour Distribution: Two hours lecture and one 2-hour lab per week.
(RE) Prerequisite(s): INPG 120 with a grade of B-or better, or permission of instructor.

## (023) (AFST) Africana Studies

ADD (SECONDARY CROSS-LIST)
$\dagger$ *160 Art of Africa, Oceania, and Pre-Columbian America (3) (See Art History 162.)
$\dagger 464$ Art of Southern and Eastern Africa (3) (See Art History 461.)
$\dagger 465$ Art and Archaeology of Ancient Africa (3) (See Art History 462.)
$\dagger 466$ Arts of the African Diaspora (3) (See Art History 463.)
†471 African-American Art (3) (See Art History 470.)

DROP (SECONDARY CROSS-LIST)
$\dagger$ 米162 - Art of Africa, Oceania, and Pre-Columbian America (3) (See Art History 162.)
$\dagger 461$ - Art of Southern and Eastern Africa (3) (See Art History 461.)
$\dagger 462$ - Art and Archaeology of Ancient Africa (3) (See Art History 462.)
$\dagger 463$ - Arts of the African Diaspora (3) (See Art History 463.)
$\dagger 470$ - African-American Art (3) (See Art History 470.)

Equivalency Table

| Current Courses <br> Africana Studies (AFST) |  |
| :---: | :---: |
| 162 | Equivalent Courses Effective Fall 2011 <br> Africana Studies (AFST) |
| 461 | 160 |
| 462 | 464 |
| 463 | 465 |
| 470 | 466 |

## (251) (CNST) Cinema Studies

ADD (SECONDARY CROSS-LIST)
$\dagger 233$ Introduction to Cinematography as Art (3) (See Art Four Dimensional Arts 235.)
$\dagger 234$ Introduction to Video Art (3) (See Art Four Dimensional Arts 236.
$\dagger 430$ History of Film and Modern and Contemporary Art (3) (See Art Four Dimensional Arts 433.)
$\dagger 431$ Cinematography as Art (4) (See Art Four Dimensional Arts 435.)
†432 Video Art (4) (See Art Four Dimensional Arts 436.)

DROP (SECONDARY CROSS-LIST)
$\dagger 235$ Introduction to Cinematography as Art (3) (See Art Media Arts 235.)
$\dagger 236$ Introduction to Video Art (3) (See Art Media Arts 236.)
$\dagger 433$ History of Film and Modern Art (3) (See Art Media Arts 433.)
$\dagger 435$ Cinematography as Art (3) (See Art Media Arts 435.)
$\dagger 436$ Video Art (3) (See Art Media Arts 436.)

Equivalency Table

| Current Courses <br> Cinema Studies (CNST) | Equivalent Courses Effective Fall 2011 <br> Cinema Studies (CNST) |
| :---: | :---: |
| 235 | 233 |
| 236 | 234 |
| 433 | 430 |


| 435 | 431 |
| :---: | :---: |
| 436 | 432 |

## (440) (GLBS) Global Studies

ADD (SECONDARY CROSS-LIST)
$\dagger 441$ Global Justice and Human Rights (3) (See Philosophy 441.)

DROP (SECONDARY CROSS-LIST)
$\dagger 393$ Global Justice and Human Rights (3)

| Equivalency Table |  |
| :---: | :---: |
| Current Course <br> Global Studies (GLBS) | Equivalent Course Effective Fall 2011 <br> Global Studies (GLBS) |
| 393 | 441 |

## (595) (JST) Judaic Studies

ADD (SECONDARY CROSS-LIST)
$\dagger 426$ Early Christian and Byzantine Art to 1350 (3) (See Art History 425.)
$\dagger 432$ Medieval Art of the West, 800-1400 (3) (See Art History 431.)

DROP (SECONDARY CROSS-LIST)
$\dagger 425$ Early Christian and Byzantine Art to 1350 (3)
† 431 Medieval Art of the West 800-1400 (3)
Equivalency Table

| Current Courses <br> Judaic Studies (JST) | Equivalent Courses Effective Fall 2011 <br> Judaic Studies (JST) |
| :---: | :---: |
| 425 | 426 |
| 431 | 432 |

## REVISE TITLE (SECONDARY CROSS-LIST)

$\dagger 311$ Introduction to the Hebrew Bible (3) (See Religious Studies 311.)
Formerly: Ancient Hebraic Religious Traditions

## (674) (MDST) Medieval Studies

ADD (SECONDARY CROSS-LIST)
$\dagger 432$ Medieval Art of the West, 800-1400 (3) (See Art History 431.)
$\dagger 442$ Northern European Painting, 1350-1600 (3) (See Art History 441.)
$\dagger 452$ The Art of Italy, 1250-1450 (3) (See Art History 451.)

DROP (SECONDARY CROSS-LIST)
$\dagger 431$ Medieval Art of the West, 800-1400 (3)
$\dagger 441$ Northern European Painting, 1350-1600 (3)
$\dagger 451$ The Art of Italy, 1250-1450 (3)
Equivalency Table

| Current Courses <br> Medieval Studies (MDST) | Equivalent Courses Effective Fall 2011 <br> Medieval Studies (MDST) |
| :---: | :---: |
| 431 | 432 |
| 441 | 442 |
| 451 | 452 |

## (994) (WOST) Women's Studies

ADD (SECONDARY CROSS-LIST)
$\dagger 384$ Gender and Sexuality in Ancient Rome (3) (See Classics 384.)

## DEPARTMENT OF MATHEMATICS

## (641) (MATH) Mathematics

## ADD

205 Functions and Modeling for Secondary Math Instruction (3) Project-based activities to strengthen and expand knowledge of topics in mathematics for secondary math instruction, focusing especially on topics from pre-calculus and the transition to calculus. (RE) Prerequisite(s): 142 or 148 and Interdisciplinary Programs 120.

## ADD PRIMARY CROSS-LIST (TO EXISTING COURSE)

$\dagger 405$ Models in Biology (3) Difference and differential equation models of biological systems. (Same as Ecology and Evolutionary Biology 406.)
(RE) Prerequisite(s): 142 or 148 or 152.

## DEPARTMENT OF MODERN FOREIGN LANGUAGES AND LITERATURES

(686) (MFLL) Modern Foreign Languages and Literatures

## ADD

米200 Topics in International Literatures and Cultures (3) Introduction to the study of non-Anglophone literatures and cultures.
Topics vary by semester.
Satisfies General Education Requirement (CC)
300 Global Texts and Cultures (3) Comprehensive overview of non-Anglophone literatures and cultures with a particular emphasis on investigating similarities and differences among a wide range of written, visual, and aural works in a variety of contexts. Topics vary by semester. Writing-emphasis course.

## (405) (FREN) French

REVISE (RE) PREREQUISITE
$\dagger 420$ French Cinema (3)
(RE) Prerequisite(s): 353.
Formerly: 351 or 352.

## SCHOOL OF MUSIC

(707) (MUED) Music Education

DROP
201 Field Experience in General Music (1)
260 Eurhythmics (1)
330 Music Methods for the Elementary School (3)

## REVISE DESCRIPTION, REVISE CREDIT HOURS, DROP REPEATABILITY, ADD (RE) PREREQUISITE

250 Functional Piano for Teachers (2) Practical piano skills for the general/vocal teacher who does not have a keyboard instrument as the applied principal. Application of skills and techniques to playing and transposing familiar school songs, choral accompaniments, and open scores. Creation of accompaniments for singing and movement exercises, listening activities, and playing instruments in various styles.
(RE) Prerequisite(s): Music Keyboard 220.
Formerly: (1) Practical piano skills for the general/vocal teacher who does not have a keyboard instrument as the applied principal. Transposition, improvisation, reading open vocal scores, and simple accompaniments.
Repeatability: May be repeated. Maximum 2 hours.

## REVISE DESCRIPTION, REVISE (RE) PREREQUISITE

251 Functional Piano for Teachers II (1) Practical piano skills for the general/vocal teacher who is a keyboard major. Advanced application of skills and techniques to playing and transposing familiar school songs, choral accompaniments, and open scores. Creation of accompaniments for singing and movement exercises, listening activities, and playing instruments in various styles.
(RE) Prerequisite(s): Music Performance 255.
Formerly: Application of skills and techniques acquired in Music Education 250 to playing and transposing familiar school songs, choral accompaniments, and open scores. Creation of accompaniments for singing and movement exercises, listening activities, and playing instruments in various styles.
(RE) Prerequisite(s): 250.

## REVISE DESCRIPTION

340 General/Vocal Music Methods (3) School methods and materials for teaching general music in the elementary and middle/junior high schools.
Formerly: School methods and materials for teaching music in the elementary, middle, and high schools.

## DEPARTMENT OF PHILOSOPHY

## (745) (PHIL) Philosophy

## ADD

*101 Introduction to Philosophy (3) Topics such as knowledge and belief, the meaning of life, the existence of God, freedom of the will, human nature and values, and mind and its place in a material universe. Writing-emphasis course.
Satisfies General Education Requirement: (AH)
*107 Honors: Introduction to Philosophy (3) Honors version of 101.
Satisfies General Education Requirement: (AH)

## DROP

*110 The Human Condition: Values and Reality (3) (satisfied AH)
*111 The Human Condition: Knowledge and Reality (3) (satisfied AH)
*117 Honors: Introduction to Philosophy I (3) (satisfied AH)
*118 Honors: Introduction to Philosophy II (3) (satisfied AH)
Equivalency Table

| Current Courses <br> Philosophy (PHIL) | Equivalent Courses Effective Fall 2011 <br> Philosophy (PHIL) |
| :---: | :---: |
| 110 | 101 |
| 111 | 107 |
| 117 |  |

## 118


#### Abstract

Rationale: PHIL 110 and 111 are being consolidating into a single introductory course (with the aim of encouraging earlier movement to more advanced courses), and 117 and 118 are being consolidated into one honors version of the new course. Impact on other units: None. Financial impact: None.


## ADD

*252 Contemporary Moral Problems (3) In light of ethical theory, issues such as euthanasia, capital punishment, reproductive technologies, sexual ethics, diversity, war, world poverty, employment practices, and the environment. Writing-emphasis course. Satisfies General Education Requirement: (AH) (WC)

DROP
*242 Contemporary Moral Issues (3) (satisfied OC and AH)
Equivalency Table

| Current Course <br> Philosophy (PHIL) | Equivalent Course Effective Fall 2011 <br> Philosophy (PHIL) |
| :---: | :---: |
| 242 | 252 |

Rationale: PHIL 252 replaces current 242 and serves the needs of the Colleges of Business and Nursing. Impact on other units: No direct impact. Financial impact: None.

## ADD

*345 Bioethics (3) Ethical issues in health care such as abortion, euthanasia, human experimentation, fairness in health care delivery, and the doctor-patient relationship.
Satisfies General Education Requirement: (WC)
*346 Environmental Ethics (3) Issues concerning the nature of the environment and the place of humanity within it.
Satisfies General Education Requirement: (WC)
*348 Honors: Environmental Ethics (3) Honors version of 346, with Service Learning component.
Satisfies General Education Requirement: (WC)
Rationale: Honors version of 346 . Impact on other units: None. Financial impact: None.
*391 Social and Political Philosophy (3) Issues such as the obligation to obey the law, liberty, oppression, equality, rights, democracy, and the just society.
Satisfies General Education Requirement: (WC)

## DROP

*246 Bioethics (3) (satisfied AH and WC)
Rationale: Cutting back 200-level courses to expand 300 -level offerings, including courses in areas more central to the discipline. As courses in a recognized sub-field of the discipline, rather than a possible pathway into it, these courses are more appropriate as 300 -level courses. Impact on other units: Although Philosophy 246 has served accreditation (and Gen Ed [AH and WC]) interests of the College of Nursing, these interests can be equally well served by our "new" Philosophy 252 (Contemporary Moral Problems), which would replace our current 242 (Contemporary Moral Issues) but with a change of Gen Ed Status from its current AH/OC to AH/WC. In addition, we are seeking to add a 300-level Bioethics course with WC designation. Financial impact: None.
*245 Environmental Ethics (3) (satisfied AH)
*290 Social and Political Philosophy (3) (satisfied AH and WC)
Equivalency Table

| Current Courses <br> Philosophy (PHIL) | Equivalent Courses Effective Fall 2011 <br> Philosophy (PHIL) |
| :---: | :---: |
| 246 | 345 |
| 245 | 346 |


|  | 348 |
| :---: | :---: |
| 290 | 391 |

DROP
*241 Engineering Ethics (3) (satisfied AH and WC)
Rationale: Cutting back 200-level courses to expand 300-level offerings, including courses in areas more central to the discipline. As courses in a recognized sub-field of the discipline, rather than a possible pathway into it, these courses are more appropriate as 300 -level courses. Impact on other units: Although Philosophy 241 has served accreditation and Gen Ed [AH and WC] interests of the College of Engineering, these interests can be equally well served by Philosophy 244 (Professional Responsibility [AH and OC]), which we are retaining. Financial impact: None.
*243 Business Ethics (3) (satisfied AH and WC)
Rationale: Cutting back 200-level courses to expand 300-level offerings, including courses in areas more central to the discipline. As courses in a recognized sub-field of the discipline, rather than a possible pathway into it, these courses are more appropriate as 300 -level courses. Impact on other units: Although Philosophy 243 has served accreditation and Gen Ed [AH and WC] interests of the College of Business, these interests can be equally well served by our 'new' Philosophy 252 (Contemporary Moral Problems), which would replace our current 242 (Contemporary Moral Issues) but with a change of Gen Ed Status from its current AH/OC to AH/WC. Philosophy 244 (Professional Responsibility [AH/OC]) is also serviceable in these regards. Financial impact: None.

## ADD

373 Philosophy of Mind (3) An introduction to central debates in the philosophy of mind. Specific topics may include the relationship between minds, brains, and bodies; the nature of the self and personal identity across time; mental causation and representation; and the nature of conscious experience.
$\dagger 441$ Global Justice and Human Rights (3) Issues such as justice between distinct and diverse political communities; universal human rights; and moral issues in environment, trade, and development. (Same as Global Studies 441.)

450 Topics in Ethical Theory (3) Topic varies.
Repeatability: May be repeated if topic differs. Maximum 9 hours.
Recommended Background: 6 hours of philosophy courses.

DROP
473 Philosophy of Mind (3)
$\dagger 393$ Global Justice and Human Rights (3) (Same as Global Studies 393.)
440 Contemporary Ethical Theory (3)
Equivalency Table

| Current Courses <br> Philosophy (PHIL) | Equivalent Courses Effective Fall 2011 <br> Philosophy (PHIL) |
| :---: | :---: |
| 473 | 373 |
| 393 | 441 |
| 440 | 450 |

## ADD

442 Topics in Applied Ethics (3) Topic varies.
Repeatability: May be repeated if topic differs. Maximum 9 hours.
Recommended Background: 6 hours of philosophy courses.
DROP
443 Advanced Business Ethics (3)
445 Advanced Environmental Ethics (3)
446 Advanced Bioethics (3)

## ADD

371 Epistemology (3) An introduction to central debates in the theory of knowledge and rational belief.

372 Metaphysics (3) An introduction to central debates in metaphysics. Specific topics may include the nature of causation; free will and determinism; time and persistence; material composition and constitution; the relationship between individuals and their attributes; and the nature of possibility and necessity.

## REVISE DESCRIPTION, DROP PRIMARY CROSS-LIST

† * 244 Professional Responsibility (3) Critical analysis of selected texts from philosophy and other fields dealing with responsibility and the nature of professionalism. Theoretical principles and analytical skills applied to selected case studies and other detailed descriptions of professional practice from engineering/architecture, business/accounting, and at least one of law/politics, the helping professions (social work, human services, ministry), or teaching. Writing-emphasis course.
Satisfies General Education Requirement: (AH) (OC)
Formerly: Critical analysis of selected classic texts from philosophy, religious studies, and social sciences dealing with responsibility and the nature of professionalism. Theoretical principles and analytical skills applied to selected case studies and other detailed descriptions of professional practice from engineering/architecture, business/accounting, and at least one of law/politics, the helping professions (social work, human services, ministry), or teaching. Writing-emphasis course. (Same as Religious Studies 244.) Satisfies General Education Requirement: (AH) (OC)

## REVISE REPEATABILITY

480 Topics in Metaphysics and Epistemology (3)
Repeatability: May be repeated if topic differs. Maximum 9 hours.
Formerly: May be repeated if topic differs. Maximum 6 hours.

## DEPARTMENT OF PSYCHOLOGY

## (830) (PSYC) Psychology

## ADD

474 Theories and Research in Child Development (3) Survey of major theories and empirical research in the field of child development. Material will encompass areas such as motor, perceptual, cognitive, and emotional development.
Recommended Background: 300.

## DEPARTMENT OF RELIGIOUS STUDIES

## (863) (REST) Religious Studies

DROP (SECONDARY CROSS-LIST)
†米244 Professional Responsibility (3) (See Philosophy 244.)

## REVISE DESCRIPTION (ADD WRITING-EMPHASIS)

305 Contemporary Religious Thought and Practice (3) Major themes, issues, and thinkers from the 19th century to the present. Writing-emphasis course.
Formerly: Major themes, issues, and thinkers from the 19 th century to the present.
342 Religious Ethics (3) Selected ethical theories and moral teachings of religious communities and thinkers, their action-guides for individuals and institutions, and their application to persons and social problems. Writing-emphasis course.
Formerly: Selected ethical theories and moral teachings of religious communities and thinkers, their action-guides for individuals and institutions, and their application to persons and social problems.
$\dagger 311$ Introduction to the Hebrew Bible (3) Development of ancient Israelite and early Jewish texts and traditions, such as those concerning the Exodus, Davidic kingship, and Zion in historical, prophetic, and apocalyptic material. Writing-emphasis course.
(Same as Judaic Studies 311.)
Formerly: Ancient Hebraic Religious Traditions (3) Development of ancient Israelite and early Jewish traditions with emphasis on those concerning the Exodus, Davidic kingship, and Zion in historical, prophetic, and apocalyptic material. Writing-emphasis course. (Same as Judaic Studies 311 .)

## PART II: PROGRAM CHANGES

## REVISE COLLEGE TEXT (DISTRIBUTION REQUIREMENTS HEADING)

- Revise Part A: Divisional Distribution Requirements, Natural Sciences, List A:
o Add GEOG 137*-GEOG 132*
- Revise Part A: Divisional Distribution Requirements, Natural Sciences, List B:


## o Drop EEB 410

o Add EEB 424

- Revise Part A: Divisional Distribution Requirements, Arts and Humanities, List A (Literature):
o Add MFLL 300*
- Revise Part A: Divisional Distribution Requirements, Arts and Humanities, List B (Philosophical and Religious Thought):
o Add PHIL 101*, PHIL 107*, PHIL 252*, REST 305, REST 342
o Drop PHIL 110, PHIL 111, PHIL 117, PHIL 118, PHIL 241, PHIL 242, PHIL 243, PHIL 245, PHIL 246, PHIL 290
- Revise Part A: Divisional Distribution Requirements, Arts and Humanities, List C (Study or Practice of the Arts):
o Add AFST 160*, ARTA 191, ARTB 191, ARTC 191, ARTD 150, ARTH 162*, ARTH 167*, ARTH 172*, ARTH 173*, ARTH 177*, ARTH 178*, ARTH 183*, ARTH 187*
o Drop ACER 191, ADES 150, ADRA 191, AFST 162, AHIS 162, AHIS 167, AHIS 172, AHIS 173, AHIS 177, AHIS 178, AHIS 183, AHIS 187, AMED 191, APAI 191, ASCU 191
- Revise Part B: Upper Level Distribution Requirements, List A (United States Studies):
o Add AFST 471, ARTH 470, ARTH 472, ARTH 473, ENGL 381
o Drop AFST 470, AHIS 470, AHIS 472, AHIS 473
- Revise Part B: Upper Level Distribution Requirements, List B (Foreign Studies—Africa):
o Add AFST 464, AFST 465, AFST 466, ARTH 461, ARTH 462, ARTH 463
o Drop AFST 461, AFST 462, AFST 463, AHIS 461, AHIS 462, AHIS 463
- Revise Part B: Upper Level Distribution Requirements, List B (Foreign Studies-Asia):
o Add ARTH 411, ARTH 413, ARTH 414, ARTH 416, ARTH 419, ARTH 464, GEOG 375
o Drop AHIS 411, AHIS 415, AHIS 416, AHIS 419, AHIS 464
- Revise Part B: Upper Level Distribution Requirements, List B (Foreign Studies-Europe):
o Add ARTH 425, ARTH 431, ARTH 441, ARTH 442, ARTH 451, ARTH 452, ARTH 453, ARTH 454, ARTH 475, ARTH 476, CLAS 461, JST 426, JST 432, MDST 432, MDST 442, MDST 452, WOST 384
o Drop AHIS 425, AHIS 431, AHIS 441, AHIS 442, AHIS 451, AHIS 452, AHIS 453, AHIS 454, AHIS 475, AHIS 476, JST 425, JST 431, MDST 431, MDST 441, MDST 451
- Revise Part B: Upper Level Distribution Requirements, List B (Foreign Studies—Critical Issues in Foreign Studies):
o Add GEOG 445, GEOG 451
- Revise Part B: Upper Level Distribution Requirements, List B (Foreign Studies—Literature Courses Taught in a Foreign Language):
o Drop FREN 351, FREN 352, FREN 412, FREN 414
o Add FREN 353


## REVISE COLLEGE TEXT (PROGRAMS OF STUDY HEADING)

- Remove Individualized Program paragraph
- Insert VolsTeach paragraph after College Scholars paragraph
o VolsTeach Program
Students pursuing a major in selected programs in the College of Arts and Sciences are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously
complete a major in mathematics or science and receive secondary education teaching licensure within the 4year undergraduate degree program through completion of a VolsTeach minor. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).


## REVISE COLLEGE TEXT (MAJORS HEADING)

- In third paragraph, remove $3^{\text {rd }}$ sentence related to individualized program major
o In lieu of a major, students may develop an individualized program (described below).


## REVISE COLLEGE TEXT (ACADEMIC DEPARTMENTS LIST)

- Drop Individualized Program heading and all associated text


## DROP INDIVIUALIZED PROGRAM MAJOR, BA

## ADD VOLSTEACH MINOR FOR MATHEMATICS MAJORS

## Minor Requirements

The VolsTeach minor for mathematics majors consists of 26 hours.

## Prerequisites

## Complete:

INPG 110 - VolsTeach: Inquiry-Based Approaches to Teaching
INPG 120 - VolsTeach: Inquiry-Based Lesson Design

## Required Courses

## Complete:

MATH 205 - Functions and Modeling for Secondary Math Instruction
INPG 385 - VolsTeach: Research Methods in Science
PHIL 360 - Philosophy of Science
MEDU 432 - Knowing and Learning in Mathematics and Science
MEDU 433 - Classroom Interactions in Mathematics and Science
MEDU 434 - Project Based Instruction
MEDU 435 - Apprentice Teaching in Math and Science

ADD VOLSTEACH MINOR FOR SCIENCE MAJORS

## Minor Requirements

The VolsTeach minor for science majors consists of 23 hours.

```
Prerequisites
    Complete:
        INPG 110-VolsTeach: Inquiry-Based Approaches to Teaching
        INPG 120-VolsTeach: Inquiry-Based Lesson Design
Required Courses
    Complete:
        INPG 385-VolsTeach: Research Methods in Science
        PHIL 360 - Philosophy of Science
        SCED 432 - Knowing and Learning in Mathematics and Science
        SCED 433-Classroom Interactions in Mathematics and Science
        SCED 434 - Project Based Instruction
        SCED 435 - Apprentice Teaching in Math and Science
```

SCHOOL OF ART

## REVISE ART HISTORY MAJOR

The Art History major consists of 36 hours.

```
College Requirements
    Arts and Sciences
I. Prerequisites (12 hours)
A. Complete (grade of C or better):
        ARTH AHIS 172 - Western Art I*
        ARTH AHIS 173-Western Art II *
```

B. Select one course (grade of $C$ or better):
ARTH AHIS 162 - Art of Africa, Oceania, and Pre-Columbian America *
ARTH AHIS 183 - Asian Art *
C. Select 3 hours (grade of $C$ or better):
ART 101 - Introduction to-Studio-Art +
ART 102 - Introduction to-4-D-Studio-Art-
ART 103- Introduction to-Studio Art II
any 100-200-level or above Art course (ART)
ACER 191; any 200-level or above Art Geramics course (except ACER 320, ACER 495)
ADRA 191 ; any 200-level or above Art Drawing course (except ADRA 312, ADRA 495)
any 200-level Art Design course (ARTD)
any 100-200-level Two-Dimensional Arts course (ARTA)
any 100-200-level Three-Dimensional Arts course except 225, 226, and 240 (ARTB)
any 100-200-level Four-Dimensional Arts course (ARTC)
any Art Media course (except AMED 330, AMED 433, AMED 495)
any Art Painting course (except APAI 314, APAI 495 )
any Art Printmaking course (except APRI 360, APRI 495)
any Art Sculpture course (except ASCU 340 , ASCU 495)
II. Major (24 hours)
A. Complete (6-hours):
AHIS 375-Seminar in Art History
AHIS-402 - Seminar in Art History II (WC)*
B. Select 6 hours:
${ }^{1}$ any 300-400 level Art History courses

## A. C. Select one course from four of the five areas ( 12 hours):

 Medieval/Early RenaissanceARTH AHIS 425 - Early Christian and Byzantine Art to 1350
ARTH AHIS 431 - Medieval Art of the West, 800-1400
ARTH AHIS 441 - Northern European Painting, 1350-1600
ARTH AHIS 451 - The Art of Italy, 1250-1450
Renaissance/Baroque
ARTH AHIS 442 - Art of Northern Europe, 1600-1675
ARTH AHIS 452 - Art of Italy, 1450-1575
ARTH AHIS 453 - Art of Southern Europe, 1575-1700
ARTH AHIS 454 - Renaissance and Baroque Theory
American
ARTH AHIS 470 - African-American Art
ARTH AHIS 472 - History of 20th-Century American Art
ARTH AHIS 473-19th-Century American Art

## 19th/20th Century

ARTH AHIS 403 - History of Photography
ARTH AHIS 416 - Chinese Art of the 20th and 21st Centuries
ARTH AHIS 472 - History of 20th-Century American Art
ARTH AHIS 475 - History of 19th-Century Painting and Sculpture in Europe
ARTH AHIS 476 - History of 20th-Century Painting and Sculpture in Europe
ARTC AHIS 433 - History of Film and Modern and Contemporary Art
Non-Western
ARTH AHIS 411 - Art of South and Southeast Asia
ARTH 413 - Art of China I
ARTH 414 - Art of China II
AHIS 415-Art of China
ARTH AHIS 416 - Chinese Art of the 20th and 21st Centuries
ARTH AHIS 419 - Art of Japan
ARTH AHIS 461 - Art of Southern and Eastern Africa

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    ARTH AHIS 462-Art and Archaeology of Ancient Africa
    ARTH AHIS 463-Arts of the African Diaspora
    ARTH AHIS 464-Oceanic Art
B. Select }6\mathrm{ additional hours:
    any 300-400 level Art History courses
    ARCH 211 - History and Theory of Architecture I
    ARCH 212 - History and Theory of Architecture II
    ARCH 213-Modern Architecture: Histories And Theories
    ARCH 410- History and Theory of Urban Form
    ARCH 412 - Non-Western and Indigenous Architecture
    ARCH 417 - The International Style
    ARCH 420-History of American Architecture
    CLAS 232 - Archaeology and Art of Ancient Greece and Rome
    CLAS 436 - Cities and Sanctuaries of the Greek and Roman World
    CLAS 442 - Intensive Survey of the Archaeology of the Prehistoric Aegean
    CLAS 443 - Intensive Survey of the Archaeology of Greece
    CLAS 444 - Intensive Survey of the Archaeology of Etruria and Rome
    CLAS 461 - Special Topics in Classical Archaeology
    REST 373 - African Religions
C. Complete (6 hours):
    ARTH 375 - Seminar in Art History I
    ARTH 402 - Seminar in Art History II (WC)*
Notes:
* Meets University General Education Requirement.
\({ }^{1}\) Courses in the departments of Classics, Religious Studies, or the School of Architecture, chosen in consultation with a departmental advisor, may be approved by petition.
```


## REVISE ART HISTORY MINOR

## Minor Requirements

The art history minor consists of 24 hours.
Prerequisites
Complete (grade of C or better):
ARTH AHIS 172 - Western Art I
ARTH AHIS 173 - Western Art II
Select one course (grade of $C$ or better):
ARTH AHIS 162 - Art of Africa, Oceania, and Pre-Columbian America
ARTH AHIS 183 - Asian Art

## Required Courses

Complete (grade of C or better):
ARTH 375 - Seminar in Art History I
Select 12 hours (grade of $\mathbf{C}$ or better):
any Art History courses numbered 200 and above (ARTH)
Select 15 hours:
any Art History courses numbered 200 and above

## REVISE GRAPHIC DESIGN MAJOR, BFA

The graphic design major is specifically designed to provide the basic visual education for students who wish to pursue careers in graphic design-related fields such as advertising, art direction, three-dimensional design, publication designs, or electronic media.

Transfer students are advised that a minimum of 21 hours in studio courses must be earned at the University of Tennessee, Knoxville, as well as ARTD 251 ADES 252. Transfer students who expect to enroll in 300 (junior level) courses must present a portfolio of 10-15 works, the majority of which must be in graphic design.

No grade below $C$ in art courses may be applied to the Bachelor of Fine Arts degree. A minimum of 42 credit hours, $300-l e v e l$ or above, must be earned prior to graduation.

A minimum of 120 hours are required. Students are advised that courses in graphic design must be taken in sequence, and that successful completion of Portfolio Review (ARTD ADES 350) is prerequisite to all upper-division courses.

Students must complete ARTD ADES 351 and ADES 255 with a grade of $C$ or better by the end of the second fall semester following successful completion of Portfolio Review (ARTD ADES 350). If ARTD ADES 351 and ADES 255 are is not successfully completed in this time, the student must resubmit a portfolio to regain entrance into the junior program. Resubmission of the portfolio must occur during the scheduled Portfolio Review.

The following core courses must be completed before students can progress into the program as majors and before further art classes may be taken.
ART 101
ART 103
ARTH 172, ARTH 173 AHIS 162, AHIS 172, AHIS 173, AHIS 183 (select one)
Those applying will be admitted into the program in rank order of cumulative average as space allows. The overall record will be evaluated for quality and seriousness of purpose. Excessive absences, withdrawals, incompletes or repeated courses may result in denial of progression. Progression into the School of Art does not guarantee progression into a chosen concentration. Progression into a concentration will follow successful completion of a concentration Portfolio Review.

## College Requirements

Arts and Sciences

## I. Art Core (18 hours)

## Complete:

ART 101 - Introduction to Studio Art I
ART 102 - Introduction to 4-D Studio Art
ART 103 - Introduction to Studio Art II
ARTA ADRA 211 - Drawing I
ARTH AHIS 172 - Western Art I*
ARTH AHIS 173 - Western Art II*
II. Graphic Design (41 hours)
A. Complete:

ARTD ADES 150 - The Idea of Graphic Design
Note: This course should be taken spring semester of the freshman year or as soon as possible. The course is required for application to portfolio review.
B. Complete (in sequence):

ARTD ADES 251 - Beginning Graphic Design I
ARTD ADES 252 - Beginning Graphic Design II
ARTD ADES 255 - Graphic Design Production
ARTD ADES 351 - Intermediate Graphic Design I
ARTD ADES 400 - Typography
ARTD ADES 352 - Intermediate Graphic Design II
ARTD ADES 405 - Computer Enhanced Graphic Design
ARTD ADES 451 - Advanced Graphic Design
ARTD ADES 452 - Graphic Design Seminar* (OC)

## C. Complete (portfolio review):

ARTD ADES 350-Graphic Design Portfolio Review (Satisfactory/No Credit grading)

## D. Select 7 hours:

ARTD ADES 444 - Graphic Design Center Practicum (maximum 6 hrs)
ARTD ADES 456 - Graphic Design Practicum
III. Required Design and Professional (6 hours)
A. Select two courses:

ARTD ADES 259 - Special Topics: Graphic Design
ARTD ADES 401 - Experiments in Sequencing
ARTD ADES 402 - Experiments in Space
ARTD ADES 403 - Experiments in Systems
ARTD ADES 405 - Computer Enhanced Graphic Design

ARTD ADES 459 - Special Topics in Graphic Design
ART 491 - Foreign Study

## IV. Studio (18 hours)

A. Select 18 hours from list below:
any 200-level or above Two-Dimensional Arts
any 200-level or above Three-Dimensional Arts (except ARTB 240)
any 200-level or above Four-Dimensional Arts
any 200 -level or above Art Ceramics
any 200-level or above Art Drawing
any 200 -level or above Art Media Arts
any 200 -level or above Art Painting
any 200 -level or above Art Printmaking
any 200-level or above Art Sculpture (except ASCU 240)

## V. Art History (3 hours)

## A. Select 3 hours:

any upper-division art history electives (ARTH)

V1. General-Curriculum (34-35 hours)
A. Complete (6 hours)*:

ENGL 101 - English Composition |*
ENGL 102 - English Composition II* (or their equivalent)
B. Communicating Through Writing (3 hours)*: any WC courses from the university general education list
C. Quantitative Reasoning (6-7 hours)*: any two QR courses from the university general education list
D. Natural Sciences (7-8 hours)*: any two NS courses from the university general education list (at least one with a laboratory)
E. Social Sciences ( 6 hours)*:
any two SS courses from the university general education list
F. Intermediate Foreign Language (6 hours)*:
any intermediate foreign language sequence or intermediate intensive course from the university general education list

* Meets University General Education Requirement.
$\diamond_{\text {DROP STUDIO ART MAJOR, BA }}$

ADD ART MAJOR, BA
Studio Art Major, BA
To qualify for a BA in Studie Art, students must meet any progression requirements for the degree. Contact specific program area faculty for review of schedules and details. It should not be assumed that a high grade point average in the major itself assures fulfilling progression requirements.

Transfer students are advised that a minimum of 20 hours in studio courses must be earned at the University of Tennessee, Knoxville. Students should be cautioned that art courses taken at another institution may not apply toward their major. ARTA ADRA 212 and ARTA APA 214 must be taken at the University of Tennessee, Knoxville, if they are taken as prerequisites for upperdivision courses in Drawing and Painting, respectively.

No grade below C (2.0) in art courses may be applied to the Bachelor of Arts major. A minimum of 42 credit hours, 300 -level or above, must be earned prior to graduation.

## College Requirements

Arts and Sciences
I. Prerequisites ( 1518 hours)
A. Complete (grade of $C$ or better):

ART 101 - Introduction to Studio Art I

ART 102 - Introduction to 4-D Studio Art
ART 103 - Introduction to Studio Art II

## B. Select 36 hours (grade of $C$ or better):

ARTH AHIS 172 - Western Art I
ARTH AHIS 173 - Western Art II
AHIS 162 - Art of Africa, Oceania, and Pre-Columbian America
AHIS 183-Asian Art
C. Select 3 additional hours (grade of $\mathbf{C}$ or better):

ARTH 162 - Art of Africa, Oceania, and Pre-Columbian America
ARTH 172 - Western Art I
ARTH 173 - Western Art II
ARTH 183 - Asian Art

## II. Major (27 24 hours)

A. Select up to 6 hours (200-level studio courses) in Two-Dimensional Arts or Graphic Design:

ARTA 211 - Drawing I
ARTA 212 - Drawing II
ARTA 213 - Painting I: Introduction
ARTA 214 - Painting II
ARTA 215 - Watercolor I: Introduction
ARTA 216 - Watercolor II
ARTA 219-Special Topics in Drawing/Painting
ARTA 231 - Photography I
ARTA 262 - Intaglio I
ARTA 263 - Lithography I
ARTA 264 - Screen Printing I
ARTA 265 - Relief
ARTA 266 - Monoprint and Monotype
ARTA 269-Special Topics in Printmaking
ARTA 291 - Papermaking and Book Arts Workshop
ARTD 251 - Beginning Graphic Design I
ARTD 252 - Beginning Graphic Design II
ARTD 255 - Graphic Design
ARTD 259 - Special Topics in Graphic Design
B. Select up to $\mathbf{3}$ hours ( 200 level studio courses) in Three-Dimensional Arts:

ARTB 221 - Ceramic Sculpture
ARTB 222 - Beginning Pottery
ARTB 225 - Portfolio Practicum - Handbuilding
ARTB 226 - Portfolio Practicum - Throwing
ARTB 229 - Ceramics: Special Topics
ARTB 240 - Techniques and Tools
ARTB 241 - Beginning Sculpture
ARTB 242 - Figuring the Body
ARTB 243 - Mold-Making and Casting
ARTB 245 - Metal Fabrication
ARTB 246 - Mixed Media Sculpture
ARTB 249 - Special Topics in Sculpture
C. Select up to $\mathbf{3}$ hours ( 200 level studio courses) in Four-Dimensional Arts:

ARTC 232 - Introduction to Performance as Art
ARTC 234 - Introduction to Sound Art
ARTC 235 - Introduction to Cinematography as Art
ARTC 236 - Introduction to Video Art
ARTC 239-Special Topics in Four-Dimensional Arts
D. Select at least 15 hours (300-400 level studio courses) in at least two of the following four areas: Two-Dimensional Arts

ARTA 311 - Drawing III

ARTA 312 - Drawing Portfolio Review<br>ARTA 313 - Painting III<br>ARTA 314 - Painting Portfolio Review<br>ARTA 331 - Photography II<br>ARTA 341 - Digital Photography<br>ARTA 342 - Large Format Photography I<br>ARTA 361 - Intermediate Print Workshop<br>ARTA 411 - Drawing IV<br>ARTA 413 - Painting IV<br>ARTA 419 - Special Topics in Drawing and Painting<br>ARTA 431 - Photography III<br>ARTA 461 - Advanced Print Workshop<br>ARTA 469 - Special Topics in Printmaking<br>ARTA 493 - Independent Study<br>ARTA 494 - Individual Problems<br>ARTA 495 - Visiting Artist Seminar<br>Three-Dimensional Arts<br>ARTB 321 - Intermediate Ceramic Sculpture<br>ARTB 322 - Intermediate Pottery<br>ARTB 323 - Intermediate Pottery and Ceramic Sculpture<br>ARTB 341 - Intermediate Sculpture<br>ARTB 343 - Advanced Mold-Making and Casting<br>ARTB 345 - Advanced Metal Fabrication<br>ARTB 346 - Advanced Mixed Media Sculpture<br>ARTB 421 - Advanced Ceramic Sculpture<br>ARTB 422 - Advanced Pottery<br>ARTB 424 - Ceramics: Clays and Glazes<br>ARTB 429 - Ceramics: Special Topics<br>ARTB 441 - Advanced Sculpture<br>ARTB 449 - Special Topics in Sculpture<br>ARTB 493 - Independent Study<br>ARTB 494 - Individual Problems<br>ARTB 495 - Visiting Artist Seminar<br>Four-Dimensional Arts<br>ARTC 401 - Experiments in Sequencing<br>ARTC 402 - Experiments in Space<br>ARTC 403 - Experiments in Systems<br>ARTC 432 - Performance as Art<br>ARTC 433 - History of Film and Modern and Contemporary Art<br>ARTC 434 - Sound Art<br>ARTC 435 - Cinematography as Art<br>ARTC 436 - Video Art<br>ARTC 439 - Special Topics in Four-Dimensional Arts<br>ARTC 493 - Independent Study<br>ARTC 494 - Individual Problems<br>ARTC 495 - Visiting Artist Seminar<br>\section*{Graphic Design}<br>ARTD 351 - Intermediate Graphic Design I<br>ARTD 352 - Intermediate Graphic Design II<br>ARTD 400 - Typography<br>ARTD 401 - Experiments in Sequencing<br>ARTD 402 - Experiments in Space<br>ARTD 403 - Experiments in Systems<br>ARTD 405 - Computer Enhanced Graphic Design<br>ARTD 410 - Advanced Typographic Investigation<br>ARTD 425 - Illustration<br>ARTD 450 - Design in Culture<br>ARTD 459 - Special Topics in Graphic Design<br>ARTD 493 - Independent Study<br>ARTD 494 - Individual Problems<br>ARTD 495 - Visiting Artist Seminar

## REVISE STUDIO ART MAJOR-TWO-DIMENSIONAL ARTS CONCENTRATION, BFA

The Bachelor of Fine Arts with a major in studio art is a professionally-oriented degree intended for those students planning careers or graduate study in the visual arts. To qualify for a BFA in with a major in studio art, students must meet the progression requirements in their concentration. Contact specific program area faculty for review of schedules and details. It should not be assumed that a high grade point average in the concentration itself assures fulfilling progression requirement. Before choosing a concentration, students should contact their faculty advisor to see what options are offered in the event they do not fulfill progression requirements.

Students seeking the Bachelor of Fine Arts should also consider pursuing a minor in art history.
Transfer students are advised that a minimum of 20 hours in studio courses must be earned at the University of Tennessee, Knoxville. Students should be cautioned that art courses taken at another institution may not apply toward their concentration. ARTA ADRA 212 and ARTA APAI 214 must be taken at the University of Tennessee, Knoxville, if they are to count toward the concentration. Courses not accepted for application toward a concentration may be counted toward other requirements.

No grade below $C$ in art courses may be applied to the Bachelor of Fine Arts major. A minimum of 42 credit hours, 300 -level or above, must be earned prior to graduation.

The following core courses must be completed before students can progress into the program as majors and before further art classes can be taken.

ART 101 - Introduction to Studio Art I
ART 103 - Introduction to Studio Art II
ARTH AHIS 162, ARTH AHIS 172, ARTH AHIS 173, ARTH AHIS 183 (select one)
Students applying to the School of Art will be admitted into the program in rank order of cumulative grade point average as space allows. The overall record will be evaluated for quality and seriousness of purpose. Excessive absences, withdrawals, incompletes or repeated courses may result in denial of progression. Progression into the School of Art does not guarantee progression into a chosen concentration. Students may be accepted into advanced concentrations in two-dimensional, three-dimensional and fourdimensional arts after passing the appropriate progression requirements.

## Art Education

The School of Art recommends the Bachelor of Fine Arts for those students pursuing licensure to teach art in schools K-12. Students must also contact the College of Education, Health, and Human Sciences for further requirements.

## College Requirements

Arts and Sciences

## I. Foundation

A. Complete:

ART 101 - Introduction to Studio Art I
ART 102 - Introduction to 4-D Studio Art
ART 103 - Introduction to Studio Art II
ARTH AHIS 172 - Western Art I*
ARTH AHIS 173 - Western Art II*
ARTA ADRA 211 - Drawing I

## B. Select one course:

ARTH AHIS 162 - Art of Africa, Oceania, and Pre-Columbian America*
ARTH AHIS 183 - Asian Art*

## C. Select 6 hours

any 300-400 level art history courses (ARTH)

## D. Select one course from each concentration (200-level studio courses):

Two-Dimensional Arts:
ARTA 212 - Drawing II
ARTA 213 - Painting I: Introduction

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    ARTA 214 - Painting II
    ARTA 215 - Watercolor I: Introduction
    ARTA 216 - Watercolor II
    ARTA 219 - Special Topics in Drawing/Painting
    ARTA 231 - Photography I
    ARTA 262 - Intaglio
    ARTA 263-Lithography I
    ARTA 264 - Screen Printing I
    ARTA 265 - Relief
    ARTA 266 - Monoprint and Monotype
    ARTA 269 - Special Topics in Printmaking
    ARTA 291 - Papermaking and Book Arts Workshop
Three-Dimensional Arts:
    ARTB 221 - Ceramic Sculpture
    ARTB 222 - Beginning Pottery
    ARTB 229-Ceramics: Special Topics
    ARTB 241-Beginning Sculpture
    ARTB 242 - Figuring the Body
    ARTB 243 - Mold-Making and Casting
    ARTB 245 - Metal Fabrication
    ARTB 246 - Mixed Media Sculpture
    ARTB 249-Special Topics in Sculpture
Four-Dimensional Arts:
    ARTC 232 - Introduction to Performance as Art
    ARTC 234 - Introduction to Sound Art
    ARTC 235 - Introduction to Cinematography as Art
    ARTC 236 - Introduction to Video Art
    ARTC 239-Special Topics in Four-Dimensional Arts
E. Select one course (200-level studio courses) from concentrations listed above or:
    ARTD 251 - Beginning Graphic Design I
    ARTD 252 - Beginning Graphic Design II
    ARTD 255 - Graphic Design
    ARTD 259 - Special Topics in Graphic Design
II. Concentration-Two-Dimensional Arts
A. Select }3\mathrm{ hours (200-level studio course):
    ARTA 212 - Drawing II
    ARTA 213 - Painting I: Introduction
    ARTA 214 - Painting II
    ARTA 215 - Watercolor I: Introduction
    ARTA 216 - Watercolor II
    ARTA 219 - Special Topics in Drawing/Painting
    ARTA 231 - Photography I
    ARTA 262 - Intaglio I
    ARTA 263 - Lithography I
    ARTA 264 - Screen Printing I
    ARTA 265 - Relief
    ARTA 266 - Monoprint and Monotype
    ARTA 269-Special Topics in Printmaking
    ARTA 291 - Papermaking and Book Arts Workshop
B. Select 16 hours (300-400 level concentration courses):
Note: Student must meet progression requirements for the concentration before taking upper-division courses.
    ARTA 311 - Drawing III
    ARTA 313 - Painting III
    ARTA 331 - Photography II
    ARTA 341 - Digital Photography
    ARTA 342 - Large Format Photography I
    ARTA 361 - Intermediate Print Workshop
    ARTA 411 - Drawing IV
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ARTA 413 - Painting IV<br>ARTA 419 - Special Topics in Drawing and Painting<br>ARTA 431 - Photography III<br>ARTA 439 - Special Topics in Media Arts<br>ARTA 461 - Advanced Print Workshop<br>ARTA 469 - Special Topics in Printmaking<br>ARTA 493 - Independent Study<br>ARTA 494 - Individual Problems<br>ARTA 495 - Visiting Artist Seminar

C. Select 16 hours (300-400 level studio electives):

Note: Studio electives may be taken in other programs/departments in consultation with departmental advisor.
Two-Dimensional Arts
ARTA 311 - Drawing III
ARTA 313 - Painting III
ARTA 331 - Photography II
ARTA 341 - Digital Photography
ARTA 342 - Large Format Photography I
ARTA 361 - Intermediate Print Workshop
ARTA 411 - Drawing IV
ARTA 413 - Painting IV
ARTA 419 - Special Topics in Drawing and Painting
ARTA 431 - Photography III
ARTA 439 - Special Topics in Four-Dimensional Arts
ARTA 461 - Advanced Print Workshop
ARTA 469 - Special Topics in Printmaking
ARTA 493 - Independent Study
ARTA 494 - Individual Problems
ARTA 495 - Visiting Artist Seminar
Three-Dimensional Arts
ARTB 321 - Intermediate Ceramic Sculpture
ARTB 322 - Intermediate Pottery
ARTB 323 - Intermediate Pottery and Ceramic Sculpture
ARTB 341 - Intermediate Sculpture
ARTB 343 - Advanced Mold-Making and Casting
ARTB 345 - Advanced Metal Fabrication
ARTB 346 - Advanced Mixed Media Sculpture
ARTB 421 - Advanced Ceramic Sculpture
ARTB 422 - Advanced Pottery
ARTB 424 - Ceramics: Clays and Glazes
ARTB 429 - Ceramics: Special Topics
ARTB 441 - Advanced Sculpture
ARTB 442 - Senior Seminar
ARTB 449 - Special Topics in Sculpture
ARTB 493 - Independent Study
ARTB 494 - Individual Problems
ARTB 495 - Visiting Artist Seminar

## Four-Dimensional Arts

ARTC 401 - Experiments in Sequencing
ARTC 402 - Experiments in Space
ARTC 403 - Experiments in Systems
ARTC 432 - Performance as Art
ARTC 433 - History of Film and Modern and Contemporary Art
ARTC 434 - Sound Art
ARTC 435 - Cinematography as Art
ARTC 436 - Video Art
ARTC 439 - Special Topics in Four-Dimensional Arts
ARTC 493 - Independent Study
ARTC 494 - Individual Problems
ARTC 495 - Visiting Artist Seminar

## D. Select 6 hours (capstone):

ARTA 496 - Capstone in Two-Dimensional Arts

## REVISE STUDIO ART MAJOR-THREE-DIMENSIONAL ARTS CONCENTRATION, BFA

The Bachelor of Fine Arts with a major in studio art is a professionally-oriented degree intended for those students planning careers or graduate study in the visual arts. To qualify for a BFA in with a major in studio art, students must meet the progression requirements in their concentration. Contact specific program area faculty for review of schedules and details. It should not be assumed that a high grade point average in the concentration itself assures fulfilling progression requirement. Before choosing a concentration, students should contact their faculty advisor to see what options are offered in the event they do not fulfill progression requirements.

Students seeking the Bachelor of Fine Arts should also consider pursuing a minor in art history.

Transfer students are advised that a minimum of 20 hours in studio courses must be earned at the University of Tennessee, Knoxville. Students should be cautioned that art courses taken at another institution may not apply toward their concentration. ARTA ADRA 212 and ARTA APAI 214 must be taken at the University of Tennessee, Knoxville, if they are to count toward the concentration. Courses not accepted for application toward a concentration may be counted toward other requirements.

No grade below $C$ in art courses may be applied to the Bachelor of Fine Arts major. A minimum of 42 credit hours, 300 -level or above, must be earned prior to graduation.

The following core courses must be completed before students can progress into the program as majors and before further art classes can be taken.

ART 101 - Introduction to Studio Art I
ART 103 - Introduction to Studio Art II
ARTH AHIS 162, ARTH AHIS 172, ARTH AHIS 173, ARTH AHIS 183 (select one)
Students applying to the School of Art will be admitted into the program in rank order of cumulative grade point average as space allows. The overall record will be evaluated for quality and seriousness of purpose. Excessive absences, withdrawals, incompletes or repeated courses may result in denial of progression. Progression into the School of Art does not guarantee progression into a chosen concentration. Students may be accepted into advanced concentrations in two-dimensional, three-dimensional and fourdimensional arts after passing the appropriate progression requirements.

## Art Education

The School of Art recommends the Bachelor of Fine Arts for those students pursuing licensure to teach art in schools K-12. Students must also contact the College of Education, Health, and Human Sciences for further requirements.

## College Requirements

Arts and Sciences

## I. Foundation

A. Complete:

ART 101 - Introduction to Studio Art I
ART 102 - Introduction to 4-D Studio Art
ART 103 - Introduction to Studio Art II
ARTH AHIS 172 - Western Art I*
ARTH AHIS 173 - Western Art II*
ARTA ADRA 211 - Drawing I

## B. Select one course:

ARTH AHIS 162 - Art of Africa, Oceania, and Pre-Columbian America* ARTH AHIS 183 - Asian Art*

## C. Select 6 hours

any 300-400 level art history courses (ARTH)

## D. Select one course from each concentration (200-level studio courses): Two-Dimensional Arts

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    ARTA 212 - Drawing II
    ARTA 213 - Painting I: Introduction
    ARTA 214 - Painting II
    ARTA 215 - Watercolor I: Introduction
    ARTA 216 - Watercolor II
    ARTA 219 - Special Topics in Drawing/Painting
    ARTA 231 - Photography I
    ARTA 262 - Intaglio I
    ARTA 263-Lithography I
    ARTA 264-Screen Printing I
    ARTA 265 - Relief
    ARTA 266 - Monoprint and Monotype
    ARTA 269-Special Topics in Printmaking
    ARTA 291 - Papermaking and Book Arts Workshop
Three-Dimensional Arts
    ARTB 221-Ceramic Sculpture
    ARTB 222 - Beginning Pottery
    ARTB 229-Ceramics: Special Topics
    ARTB 241-Beginning Sculpture
    ARTB 242 - Figuring the Body
    ARTB 243 - Mold-Making and Casting
    ARTB 245 - Metal Fabrication
    ARTB 246 - Mixed Media Sculpture
    ARTB 249-Special Topics in Sculpture
Four-Dimensional Arts
    ARTC 232 - Introduction to Performance as Art
    ARTC 234 - Introduction to Sound Art
    ARTC 235-Introduction to Cinematography as Art
    ARTC 236 - Introduction to Video Art
    ARTC 239-Special Topics in Four-Dimensional Arts
E. Select one course (200-level studio course) from concentrations listed above or:
    ARTD 251 - Beginning Graphic Design I
    ARTD 252 - Beginning Graphic Design II
    ARTD 255 - Graphic Design Production
    ARTD 259 - Special Topics: Graphic Design
II. Concentration-Three-Dimensional Arts
A. Select 3 hours (200-level studio course):
Ceramics
    ARTB 221 - Ceramic Sculpture
    ARTB 222 - Beginning Pottery
    ARTB 229-Ceramics: Special Topics
    ARTB 241-Beginning Sculpture
    ARTB 242 - Figuring the Body
    ARTB 243 - Mold-Making and Casting
    ARTB 245 - Metal Fabrication
ARTB 246 - Mixed Media Sculpture
ARTB 249-Special Topics in Sculpture
B. Select 16 hours (300-400 level concentration courses):
Note: Student must meet progression requirements for the concentration before taking upper-division courses.
ARTB 321 - Intermediate Ceramic Sculpture
ARTB 322 - Intermediate Pottery
ARTB 323 - Intermediate Pottery and Ceramic Sculpture
ARTB 341 - Intermediate Sculpture
ARTB 343 - Advanced Mold-Making and Casting
ARTB 345 - Advanced Metal Fabrication
ARTB 346 - Advanced Mixed Media Sculpture
ARTB 421 - Advanced Ceramic Sculpture
ARTB 422 - Advanced Pottery
```

ARTB 424 - Ceramics: Clays and Glazes<br>ARTB 429 - Ceramics: Special Topics<br>ARTB 441 - Advanced Sculpture<br>ARTB 442 - Senior Seminar<br>ARTB 449 - Special Topics in Sculpture<br>ARTB 493 - Independent Study<br>ARTB 494 - Individual Problems<br>ARTB 495 - Visiting Artist Seminar

C. Select 16 hours (300-400 level studio electives):

Note: Studio electives may be taken in other programs/departments in consultation with departmental advisor. Two-Dimensional Arts

ARTA 311 - Drawing III
ARTA 313 - Painting III
ARTA 331 - Photography II
ARTA 341 - Digital Photography
ARTA 342 - Large Format Photography I
ARTA 361 - Intermediate Print Workshop
ARTA 411 - Drawing IV
ARTA 413 - Painting IV
ARTA 419 - Special Topics in Drawing and Painting
ARTA 431 - Photography III
ARTA 439 - Special Topics in Four-Dimensional Arts
ARTA 461 - Advanced Print Workshop
ARTA 469 - Special Topics in Printmaking
ARTA 493 - Independent Study
ARTA 494 - Individual Problems
ARTA 495 - Visiting Artist Seminar
Three-Dimensional Arts
ARTB 321 - Intermediate Ceramic Sculpture
ARTB 322 - Intermediate Pottery
ARTB 323 - Intermediate Pottery and Ceramic Sculpture
ARTB 341 - Intermediate Sculpture
ARTB 343 - Advanced Mold-Making and Casting
ARTB 345 - Advanced Metal Fabrication
ARTB 346 - Advanced Mixed Media Sculpture
ARTB 421 - Advanced Ceramic Sculpture
ARTB 422 - Advanced Pottery
ARTB 424 - Ceramics: Clays and Glazes
ARTB 429 - Ceramics: Special Topics
ARTB 441 - Advanced Sculpture
ARTB 442 - Senior Seminar
ARTB 449 - Special Topics in Sculpture
ARTB 493 - Independent Study
ARTB 494 - Individual Problems
ARTB 495 - Visiting Artist Seminar
Four-Dimensional Arts
ARTC 401 - Experiments in Sequencing
ARTC 402 - Experiments in Space
ARTC 403 - Experiments in Systems
ARTC 432 - Performance as Art
ARTC 433 - History of Film and Modern and Contemporary Art
ARTC 434 - Sound Art
ARTC 435 - Cinematography as Art
ARTC 436 - Video Art
ARTC 439 - Special Topics in Four-Dimensional Arts
ARTC 493 - Independent Study
ARTC 494 - Individual Problems
ARTC 495 - Visiting Artist Seminar
D. Select 6 hours (capstone):

## ARTB 496 - Capstone in Three-Dimensional Arts

## REVISE STUDIO ART MAJOR-FOUR-DIMENSIONAL ARTS CONCENTRATION, BFA

The Bachelor of Fine Arts with a major in studio art is a professionally-oriented degree intended for those students planning careers or graduate study in the visual arts. To qualify for a BFA in with a major in studio art, students must meet the progression requirements in their concentration. Contact specific program area faculty for review of schedules and details. It should not be assumed that a high grade point average in the concentration itself assures fulfilling progression requirement. Before choosing a concentration, students should contact their faculty advisor to see what options are offered in the event they do not fulfill progression requirements.

Students seeking the Bachelor of Fine Arts should also consider pursuing a minor in art history.

Transfer students are advised that a minimum of 20 hours in studio courses must be earned at the University of Tennessee, Knoxville. Students should be cautioned that art courses taken at another institution may not apply toward their concentration. ARTA ADRA 212 and ARTA APAI 214 must be taken at the University of Tennessee, Knoxville, if they are to count toward the concentration. Courses not accepted for application toward a concentration may be counted toward other requirements

No grade below C in art courses may be applied to the Bachelor of Fine Arts major. A minimum of 42 credit hours, 300 -level or above, must be earned prior to graduation.

The following core courses must be completed before students can progress into the program as majors and before further art classes can be taken.

ART 101 - Introduction to Studio Art I
ART 103 - Introduction to Studio Art II
ARTH AHIS 162, ARTH AHIS 172, ARTH AHIS 173, ARTH AHIS 183 (select one)
Students applying to the School of Art will be admitted into the program in rank order of cumulative grade point average as space allows. The overall record will be evaluated for quality and seriousness of purpose. Excessive absences, withdrawals, incompletes or repeated courses may result in denial of progression. Progression into the School of Art does not guarantee progression into a chosen concentration. Students may be accepted into advanced concentrations in two-dimensional, three-dimensional and fourdimensional arts after passing the appropriate progression requirements.

## Art Education

The School of Art recommends the Bachelor of Fine Arts for those students pursuing licensure to teach art in schools K-12. Students must also contact the College of Education, Health, and Human Sciences for further requirements.

## College Requirements

Arts and Sciences

## I. Foundation

## A. Complete:

ART 101 - Introduction to Studio Art I
ART 102 - Introduction to 4-D Studio Art
ART 103 - Introduction to Studio Art II
ARTH AHIS 172 - Western Art I*
ARTH AHIS 173 - Western Art II*
ARTA ADRA 211 - Drawing I

## B. Select one course:

ARTH AHIS 162 - Art of Africa, Oceania, and Pre-Columbian America* ARTH AHHS 183 - Asian Art*

## C. Select 6 hours

any 300-400 level art history courses (ARTH)
D. Select one course from each concentration (200-level studio courses): Two-Dimensional Arts ARTA 212 - Drawing II

```
    ARTA 213 - Painting I: Introduction
    ARTA 214 - Painting II
    ARTA 215 - Watercolor I: Introduction
    ARTA 216 - Watercolor II
    ARTA 219 - Special Topics in Drawing/Painting
    ARTA 231 - Photography I
    ARTA 262 - Intaglio I
    ARTA 263-Lithography I
    ARTA 264 - Screen Printing I
    ARTA 265 - Relief
    ARTA 266 - Monoprint and Monotype
    ARTA 269 - Special Topics in Printmaking
    ARTA 291 - Papermaking and Book Arts Workshop
Three-Dimensional Arts
    ARTB 221 - Ceramic Sculpture
    ARTB 222 - Beginning Pottery
    ARTB 229-Ceramics: Special Topics
    ARTB 241-Beginning Sculpture
    ARTB 242 - Figuring the Body
    ARTB 243 - Mold-Making and Casting
    ARTB 245 - Metal Fabrication
    ARTB 246 - Mixed Media Sculpture
    ARTB 249-Special Topics in Sculpture
Four-Dimensional Arts
    ARTC 232 - Introduction to Performance as Art
    ARTB 234 - Introduction to Sound Art
    ARTB 235- Introduction to Cinematography as Art
    ARTB 236 - Introduction to Video Art
    ARTB 239 - Special Topics in Four-Dimensional Arts
E. Select one course (200-level studio course) from concentrations listed above or:
    ARTD 251 - Beginning Graphic Design I
    ARTB 252 - Beginning Graphic Design II
    ARTD 255 - Graphic Design Production
    ARTB 259 - Special Topics: Graphic Design
II. Concentration-Four-Dimensional Arts
A. Select 3 hours (200-level studio course):
Four Dimensional Arts (Film, Video, and Performance)
    ARTC 232 - Introduction to Performance as Art
    ARTC 234 - Introduction to Sound Art
    ARTC 235-Introduction to Cinematography as Art
    ARTC 236 - Introduction to Video Art
    ARTC 239 - Special Topics in Four-Dimensional Arts
B. Select 16 hours (300-400 level concentration courses):
Note: Student must meet progression requirements for the concentration before taking upper-division courses.
Four Dimensional Arts (Film, Video, and Performance)
    ARTC 401 - Experiments in Sequencing
    ARTC 402 - Experiments in Space
    ARTC 403-Experiments in Systems
    ARTC 432 - Performance as Art
    ARTC 433 - History of Film and Modern and Contemporary Art
    ARTC 434 - Sound Art
    ARTC 435- Cinematography as Art
    ARTC 436 - Video Art
    ARTC 439-Special Topics in Four-Dimensional Arts
    ARTC 493-Independent Study
    ARTC 494 - Individual Problems
    ARTC 495 - Visiting Artist Seminar
```


## C. Select 16 hours (300-400 level studio electives):

Note: Studio electives may be taken in other programs/departments in consultation with departmental advisor.
Two-Dimensional Arts
ARTA 311 - Drawing III
ARTA 313 - Painting III
ARTA 331 - Photography II
ARTA 341 - Digital Photography
ARTA 342 - Large Format Photography I
ARTA 361 - Intermediate Print Workshop
ARTA 411 - Drawing IV
ARTA 413 - Painting IV
ARTA 419 - Special Topics in Drawing and Painting
ARTA 431 - Photography III
ARTA 461 - Advanced Print Workshop
ARTA 469 - Special Topics in Printmaking
ARTA 493 - Independent Study
ARTA 494 - Individual Problems
ARTA 495 - Visiting Artist Seminar
Three-Dimensional Arts
ARTB 321 - Intermediate Ceramic Sculpture
ARTB 322 - Intermediate Pottery
ARTB 323 - Intermediate Pottery and Ceramic Sculpture
ARTB 341 - Intermediate Sculpture
ARTB 343 - Advanced Mold-Making and Casting
ARTB 345 - Advanced Metal Fabrication
ARTB 346 - Advanced Mixed Media Sculpture
ARTB 421 - Advanced Ceramic Sculpture
ARTB 422 - Advanced Pottery
ARTB 424 - Ceramics: Clays and Glazes
ARTB 429 - Ceramics: Special Topics
ARTB 441 - Advanced Sculpture
ARTB 442 - Senior Seminar
ARTB 449 - Special Topics in Sculpture
ARTB 493 - Independent Study
ARTB 494 - Individual Problems
ARTB 495 - Visiting Artist Seminar
Four-Dimensional Arts
ARTC 401 - Experiments in Sequencing
ARTC 402 - Experiments in Space
ARTC 403 - Experiments in Systems
ARTC 432 - Performance as Art
ARTC 433 - History of Film and Modern and Contemporary Art
ARTC 434 - Sound Art
ARTC 435 - Cinematography as Art
ARTC 436 - Video Art
ARTC 439 - Special Topics in Four-Dimensional Arts
ARTC 493 - Independent Study
ARTC 494 - Individual Problems
ARTC 495 - Visiting Artist Seminar
D. Complete 6 hours (capstone):

ARTC 496 - Capstone in Four-Dimensional Arts

REVISE STUDIO ART MINOR

## Minor Requirements

The minor consists of 30 hours.

## Prerequisites

## Complete:

ART 101 - Introduction to Studio Art I
ART 102 - Introduction to 4-D Studio Art
ART 103 - Introduction to Studio Art II

## Select 3 hours (grade of $C$ or better):

ARTH AHIS 172 - Western Art I
ARTH AHIS 173 - Western Art II

Select 3 additional hours (grade of $\mathbf{C}$ or better):
ARTH AHIS 162 - Art of Africa, Oceania, and Pre-Columbian America
ARTH172 - Western Art I
ARTH 173 - Western Art II
ARTH AHIS 183 - Asian Art

Required Courses
Select up to 7 hours (200-400 level studio courses):
Two-Dimensional Arts
ARTA 211 - Drawing I
ARTA 212 - Drawing II
ARTA 213 - Painting I: Introduction
ARTA 214 - Painting II
ARTA 215 - Watercolor I: Introduction
ARTA 216 - Watercolor II
ARTA 219 - Special Topics in Drawing/Painting
ARTA 231 - Photography I
ARTA 262 - Intaglio I
ARTA 263 - Lithography I
ARTA 264 - Screen Printing I
ARTA 265 - Relief
ARTA 266 - Monoprint and Monotype
ARTA 269-Special Topics in Printmaking
ARTA 291 - Papermaking Workshop
Three-Dimensional Arts
ARTB 221 - Ceramic Sculpture
ARTB 222 - Beginning Pottery
ARTB 229 - Ceramics: Special Topics
ARTB 241 - Beginning Sculpture
ARTB 242 - Figuring the Body
ARTB 243 - Mold-Making and Casting
ARTB 245 - Metal Fabrication
ARTB 246 - Mixed Media Sculpture
ARTB 249-Special Topics in Sculpture
ARTB 321 - Intermediate Ceramic Sculpture
ARTB 322 - Intermediate Pottery
ARTB 341 - Intermediate Sculpture
ARTB 343 - Advanced Mold-Making and Casting
ARTB 345 - Advanced Metal Fabrication
ARTB 346 - Advanced Mixed Media Sculpture
ARTB 421 - Advanced Ceramic Sculpture
ARTB 422 - Advanced Pottery
ARTB 424 - Ceramics: Clays and Glazes
ARTB 429 - Ceramics: Special Topics
ARTB 441 - Advanced Sculpture
ARTB 442 - Senior Seminar
ARTB 449- Special Topics in Sculpture
ARTB 493 - Independent Study
ARTB 494 - Individual Problems
Four-Dimensional Arts
ARTC 232 - Introduction to Performance as Art
ARTC 234 - Introduction to Sound Art

ARTC 235 - Introduction to Cinematography as Art<br>ARTC 236 - Introduction to Video Art<br>ARTC 239 - Special Topics in Media Arts<br>ARTC 401 - Experiments in Sequencing<br>ARTC 402 - Experiments in Space<br>ARTC 403 - Experiments in Systems<br>ARTC 432 - Performance as Art<br>ARTC 433 - History of Film and Modern and Contemporary Art<br>ARTC 434 - Sound Art<br>ARTC 435-Cinematography as Art<br>ARTC 436 - Video Art<br>ARTC 439 - Special Topics in Media Arts<br>ARTC 450 - Senior Project<br>ARTC 493 - Independent Study<br>ARTC 494 - Individual Problems

## Select at least 8 hours (300-400 level studio courses):

## Two-Dimensional Arts

ARTA 311 - Drawing III
ARTA 312 - Drawing Portfolio Review
ARTA 313 - Painting III
ARTA 331 - Photography II
ARTA 341 - Digital Photography
ARTA 342 - Large Format Photography I
ARTA 361 - Intermediate Print Workshop
ARTA 411 - Drawing IV
ARTA 413 - Painting IV
ARTA 419 - Special Topics in Drawing and Painting
ARTA 431 - Photography III
ARTA 461 - Advanced Print Workshop
ARTA 469 - Special Topics in Printmaking
ARTA 493 - Independent Study
ARTA 494 - Individual Problems
Three-Dimensional Arts
ARTB 321 - Intermediate Ceramic Sculpture
ARTB 322 - Intermediate Pottery
ARTB 341 - Intermediate Sculpture
ARTB 343 - Advanced Mold-Making and Casting
ARTB 345 - Advanced Metal Fabrication
ARTB 346 - Advanced Mixed Media Sculpture
ARTB 421 - Advanced Ceramic Sculpture
ARTB 422 - Advanced Pottery
ARTB 424 - Ceramics: Clays and Glazes
ARTB 429 - Ceramics: Special Topics
ARTB 441 - Advanced Sculpture
ARTB 442 - Senior Seminar
ARTB 449 - Special Topics in Sculpture
ARTB 493 - Independent Study
ARTB 494 - Individual Problems
Four-Dimensional Arts
ARTC 401 - Experiments in Sequencing
ARTC 402 - Experiments in Space
ARTC 403 - Experiments in Systems
ARTC 432 - Performance as Art
ARTC 433 - History of Film and Modern and Contemporary Art
ARTC 434 - Sound Art
ARTC 435-Cinematography as Art
ARTC 436 - Video Art
ARTC 439 - Special Topics in Media Arts
ARTC 450 - Senior Project
ARTC 493 - Independent Study

ARTC 494 - Individual Problems

## DEPARTMENT OF BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY

## REVISE DEPARTMENT TEXT (ADD PARAGRAPH AT END)

Biochemistry, cell biology, and molecular biology study the function of cells and organisms at the molecular level. The concentration includes the study of the structure and function of proteins, lipids, carbohydrates, DNA and RNA, as well as how these and other molecules control cellular and organismal function. The curriculum prepares students for a variety of careers in biological research, biotechnology, the health professions or education.

Students wishing to emphasize study in this area elect to major in biological sciences with a concentration in biochemistry and cellular and molecular biology. See the description of the major and concentration under Division of Biology for requirements.

Students pursuing a B.S. degree in the Department of Biochemistry and Cellular and Molecular Biology are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or science and receive secondary education teaching licensure within the 4-year undergraduate degree program through completion of a VolsTeach minor. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science ( 100 Greve Hall).

## REVISE BIOLOGICAL SCIENCES MAJOR—BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY CONCENTRATION

## III. Select (13 total hours):

A. Select one laboratory course:

BCMB 322 - Introduction to Plant Physiology Laboratory
BCMB 403 - Advanced Genetics Laboratory
BCMB 404 - Plant Molecular Biology
BCMB 416 - Neurobiology Laboratory
BCMB 419 - Cellular and Comparative Biochemistry Laboratory
BCMB 452 - Independent Research in BCMB
B. Select one physiology course:

BCMB 321 - Introductory Plant Physiology
BCMB 415 - Foundations in Neurobiology
BCMB 440-General Physiology

## DIVISION OF BIOLOGY

## REVISE DEPARTMENT TEXT (ADD PARAGRAPH AT END)

The Division of Biology consists of the following departments: Biochemistry and Cellular and Molecular Biology (BCMB), Ecology and Evolutionary Biology (EEB), and Microbiology. Each offers a separate concentration within a common Bachelor of Science major, Biological Sciences, followed by the concentration name. (Honors options are described after each concentration.) See departments for catalog information.

Students pursuing a B.S. degree in biological sciences are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or science and receive secondary education teaching licensure within the 4-year undergraduate degree program through completion of a VolsTeach minor. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).

## DEPARTMENT OF CHEMISTRY

## REVISE DEPARTMENT TEXT (ADD PARAGRAPH AT END)

## Cooperative Program

A cooperative program is available to students who are chemistry majors. After the freshman year, the student alternates a semester in school with a semester in a job in the chemical industry. The program normally requires five years and involves a total of four work semesters and eight school semesters. Students are required to have at least a 2.5 average to enter and remain in the program. Some opportunity exists for students to enter the program later than the end of the freshman year. Interested students
should make application to the head of the department at least one semester in advance of the beginning of the first work period. Further information will be supplied on request.


#### Abstract

Students pursuing a B.S. degree in the Department of Chemistry are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or science and receive secondary education teaching licensure within the 4-year undergraduate degree program through completion of a VolsTeach minor. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).


## DEPARTMENT OF CLASSICS

$\diamond$ ADD:
CLASSICS MAJOR-CLASSICAL ARCHAEOLOGY CONCENTRATION, BA
CLASSICS MAJOR-HONORS CLASSICAL ARCHAEOLOGY CONCENTRATION, BA CLASSICAL ARCHAEOLOGY MINOR

## ADD CLASSICS MAJOR—CLASSICAL ARCHAEOLOGY CONCENTRATION, BA

## College Requirements

Arts and Sciences

## Major Requirements

The concentration in classical archaeology consists of 27 hours.

## A. Complete:

CLAS 232 - Archaeology and Art of Ancient Greece and Rome

## B. Select 6 hours:

CLAS 436 - Cities and Sanctuaries of the Greek and Roman World
CLAS 442 - Intensive Survey of the Archaeology of the Prehistoric Aegean
CLAS 443 - Intensive Survey of the Archaeology of Greece
CLAS 444 - Intensive Survey of the Archaeology of Etruria and Rome
CLAS 445 - Ancient and Medieval Seafaring
CLAS 461 - Special Topics in Classical Archaeology

## C. Select 3 hours:

CLAS 301 - History of Early Greece
CLAS 302 - History of Classical Greece
CLAS 303 - History of the Roman Republic
CLAS 304 - History of the Roman Empire
CLAS 305 - History of the Late Roman Empire
CLAS 306 - History of Hellenistic Greece

## D. Select 3 hours:

ANTH 361 - Historical Archaeology
ANTH 362 - Principles of Archaeology
ANTH 464 - Principles of Zooarchaeology
Note: With permission of the departmental advisor, ANTH 369 may count toward this group.

## E. Select 9 hours:

any 200-level or above Classics courses (excluding Classics 273)

## F. Select 3 hours:

any 300-level or above Classics course
ANTH 435 - Historical Archaeology Laboratory
ANTH 463 - Rise of Complex Civilizations
HIST 382 - Archaeology of the Biblical World
HIST 400 - History and Archaeology of Mesopotamia
HIST 486 - Studies in the Ancient Near East

Note: The student must satisfy the College's foreign language requirement with Greek, Latin, French or German.

## ADD CLASSICS MAJOR—HONORS CLASSICAL ARCHAEOLOGY CONCENTRATION, BA

## Honors Concentration

The Honors Classical Archaeology Concentration consists of 30 hours. The required core of the major is Classics 232 , which the student must pass with a B+ or higher. 9 hours may be from any Classics course numbered 200 or above (excluding Classics 273 ). In strict consultation with a departmental advisor, the student pursuing Honors in Classical Archaeology will select an additional 15 hours from Classics 301, 302, 303, 304, 305, 306, 436, 442, 443, 444, 445, 461; Anthropology 361, 362, 435, 463, 464; History 382, 400,486 , to design a program that will advance his or her understanding of a particular specialty within the field of Classical Archaeology. The student must satisfy the College's foreign language requirement with Greek, Latin, French or German. To graduate with Honors, the student must maintain a minimum B+ average in Classics department courses and a minimum cumulative B+ average at UT. In total, the student must take a minimum of 15 hours of Honors courses, not all of which need to be in the major subject area. The student will present an Honors thesis, for which 3 hours of independent study credit will be earned; the thesis must receive a grade of $\mathrm{B}+$ or higher to permit graduation with Honors.

## ADD CLASSICAL ARCHAEOLOGY MINOR

## Minor Requirements

The minor consists of 18 hours.

## Complete:

CLAS 232 - Archaeology and Art of Ancient Greece and Rome

## Select 6 hours:

CLAS 436 - Cities and Sanctuaries of the Greek and Roman World
CLAS 442 - Intensive Survey of the Archaeology of the Prehistoric Aegean
CLAS 443 - Intensive Survey of the Archaeology of Greece
CLAS 444 - Intensive Survey of the Archaeology of Etruria and Rome
CLAS 445 - Ancient and Medieval Seafaring
CLAS 461 - Special Topics in Classical Archaeology

## Select 3 hours:

CLAS 301 - History of Early Greece
CLAS 302 - History of Classical Greece
CLAS 303 - History of the Roman Republic
CLAS 304 - History of the Roman Empire
CLAS 305 - History of the Late Roman Empire
CLAS 306 - History of Hellenistic Greece

## Select 6 hours:

any 200-level or above Classics courses (excluding Classics 273)

## REVISE HONORS CLASSICAL CIVILIZATION CONCENTRATION

- First sentence
o The Honors Classical Civilization concentration consists of 3029 hours.
- Last sentence
$0 \quad$ The student will present an Honors thesis, for which $3 z$ hours of independent study credit will be earned; the thesis must receive a grade of $\mathrm{B}+$ or higher to permit graduation with Honors.


## REVISE HONORS GREEK CONCENTRATION

- First sentence
o The Honors Greek concentration consists of 3029 hours.
- Last sentence
o The student will present an Honors thesis, for which $3 z$ hours of independent study credit will be earned; the thesis must receive a grade of $\mathrm{B}+$ or higher to permit graduation with Honors.


## REVISE HONORS LATIN CONCENTRATION

- First sentence
o The Honors Latin concentration consists of 3029 hours.
- Last sentence
o The student will present an Honors thesis, for which $3 z$ hours of independent study credit will be earned; the thesis must receive a grade of $\mathrm{B}+$ or higher to permit graduation with Honors.


## DEPARTMENT OF EARTH AND PLANETARY SCIENCES

## REVISE DEPARTMENT TEXT

The Department of Earth and Planetary Sciences emphasizes study of the Earth and other planetary systems at all scales of observation to understand physical, chemical, and biological processes operating over a range of geologic time scales, from hours to billions of years, and to interpret the future evolution of the Earth and other terrestrial bodies within our solar system.

The Department offers concentrations in Geology and Environmental Studies. An honors concentration is also available in Geology. In addition to disciplinary coursework, each concentration is supplemented by required coursework in chemistry, mathematics, physics, and biology that will help students develop critical skills valued in today's job market.

The core curriculum will provide students with a detailed understanding of rock forming minerals; the physical, chemical, and biological processes involved in rock formation (igneous, sedimentary, and metamorphic); the biologic and tectonic evolution of the Earth; field recognition of geologic processes; and the composition and evolution of extraterrestrial planets. Students then select a suite of upper-level electives to enhance interests in specific geologic disciplines. These courses are also supplemented by required coursework in chemistry, mathematics, physics, and biology that will help-students develop-critical skills valued in today's job market.

Students graduating with a degree from the Department of Earth and Planetary Sciences will be highly marketable in traditional fields of environmental consulting and oil \& gas exploration, as well as employable in private industry or by such governmental agencies as EPA, NASA, or the United States Geological Survey. The breadth and flexibility of a degree in Earth and Planetary Sciences also provides superb training for students interested in entering careers in science education, environmental law, science/nature writing, or public policy.

## Students in the Department of Earth and Planetary Sciences who are pursuing a concentration in Geology, a concentration in

 Environmental Studies with a math or science emphasis, or an Honor's concentration equivalent are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or science and receive secondary education teaching licensure within the 4-year undergraduate degree program through completion of a VolsTeach minor. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science ( 100 Greve Hall).DROP:
GEOLOGY MAJOR
GEOLOGY MAJOR—HONORS CONCENTRATION
ADD:
GEOLOGY AND ENVIRONMENTAL STUDIES MAJOR—GEOLOGY CONCENTRATION GEOLOGY AND ENVIRONMENTAL STUDIES MAJOR—HONORS GEOLOGY CONCENTRATION GEOLOGY AND ENVIRONMENTAL STUDIES MAJOR-ENVIRONMENTAL STUDIES CONCENTRATION GEOLOGY AND ENVIRONMENTAL STUDIES MAJOR—HONORS ENVIRONMENTAL STUDIES CONCENTRATION

## ADD GEOLOGY AND ENVIRONMENTAL STUDIES MAJOR-GEOLOGY CONCENTRATION

The Geology concentration is designed to provide students with a detailed understanding of rock forming minerals; the physical, chemical, and biological processes involved in rock formation (igneous, sedimentary, and metamorphic); the biologic and tectonic evolution of the Earth; field recognition of geologic processes; and the composition and evolution of extraterrestrial planets. Students then select a suite of upper-level electives to enhance interests in specific geologic disciplines.

## Prerequisites

Students wishing to declare their major in Geology and Environmental Studies should do so at the earliest opportunity.

## A. Select one sequence:

CHEM 120 - General Chemistry I
CHEM 130 - General Chemistry II
CHEM 128 - Honors: General Chemistry I
CHEM 138 - Honors: General Chemistry II
Note: CHEM 130 or CHEM 138 may be taken concurrently with 300 -level geology courses

## B. Select two courses:

GEOL 101 - The Dynamic Earth
GEOL 102 - Earth, Life, and Time
GEOL 103 - The Earth's Environments
GEOL 104 - Exploring the Planets

## Corequisites

## A. Select one sequence:

MATH 141 - Calculus I
MATH 142 - Calculus II

MATH 147 - Honors: Calculus I
MATH 148 - Honors: Calculus II

MATH 151 - Mathematics for the Life Sciences I
MATH 151 - Mathematics for the Life Sciences II

## B. Select one course:

EF 151 - Physics for Engineers I
EF 157 - Honors: Physics for Engineers I
PHYS 135 - Introduction to Physics for Physical Science and mathematics Majors I
PHYS 137 - Honors: Fundamentals of Physics for Physics Majors I
PHYS 221 - Elements of Physics

## C. Select one course:

BIOL 111 - General Botany
BIOL 130 - Biodiversity
BIOL 138 - Honors Biodiversity

## Concentration Requirements

Students are encouraged to participate in undergraduate research. A maximum of 3 hours of GEOL 493 may count toward the major.
A. Complete:

GEOL 310 - Mineralogy
GEOL 320 - Paleobiology
GEOL 330 - Igneous and Metamorphic Petrology
GEOL 340 - Earth Sedimentary Processes
GEOL 370 - Earth Structure and Geophysics
GEOL 380 - Planetary Geoscience
B. Complete at least 5 hours:

GEOL 440 - Field Geology
C. Select 9 hours:

400-level or above GEOL courses

Students who have completed five upper-division courses in either the Geology or Environmental Studies concentration, and maintain a cumulative GPA of at least 3.25 , are encouraged to pursue an honors concentration. In addition to fulfilling all requirements for their preferred concentration, an honors concentration requires 3 hours of GEOL 491, GEOL 492, or GEOL 493; 3 hours of GEOL 497 during which students will complete written and oral presentation of thesis results; and an additional 9 hours of honors coursework (including honors-by-contract). A GPA of at least 3.25 must be maintained throughout matriculation. Interested students should consult their academic advisor for details.

## ADD GEOLOGY AND ENVIRONMENTAL STUDIES MAJOR—ENVIRONMENTAL STUDIES CONCENTRATION

The Environmental Studies concentration provides sound scientific, socioeconomic, and philosophical background for understanding the Earth's environment and prepares the student for careers in science, education, law, business, public policy, and many other fields.

## Corequisites

Students wishing to declare their major in Geology and Environmental Studies should do so at the earliest opportunity.

## A. Complete:

BIOL 250 - General Ecology
ECON 201 - Introductory Economics: A Survey Course
B. Select one course:

GEOL 101 - The Dynamic Earth
GEOL 102 - Earth, Life, and Time
GEOL 103 - The Earth's Environments
GEOL 104 - Exploring the Planets
C. Select one course:

GEOL 202 - Earth as an Ecosystem: Modern Problems and Solutions
GEOL 206 - Sustainability: Reducing our Impact on Planet Earth

## D. Select one sequence:

BIOL 101 - Humankind and the Biotic World
BIOL 102 - Humankind and the Biotic World
BIOL 111 - General Botany
BIOL 112 - General Botany
BIOL 130 - Biodiversity
BIOL 140 - Organization and Function of the Cell

## $E$. Select one sequence:

CHEM 100 - Principles of Chemistry
CHEM 110 - Introduction to Organic and Biochemistry
CHEM 120 - General Chemistry I
CHEM 130 - General Chemistry II
PHYS 221 - Elements of Physics
PHYS 222 - Elements of Physics

## F. Select one sequence:

MATH 123 - Finite Mathematics
MATH 125 - Basic Calculus
MATH 141 - Calculus I
MATH 142 - Calculus II
MATH 151 - Mathematics for the Life Sciences I
MATH 151 - Mathematics for the Life Sciences II

## Concentration Requirements

## A. Select 15 hours:

GEOG 345 - Population and Environment
JREM 451 - Environmental Writing
PHIL 346 - Environmental Ethics
FWF 250 - Conservation
GLBS 250 - Introduction to Global Studies (one course from this group only)
SOC 360 - Environment and Resources

ECON 362 - Environmental and Natural Resource Policy
AREC 470 - Policy Analysis for Environmental and Natural Resource Management (one course from this group only)

## B. Select one course

GEOL 455 - Environmental Geology
GEOL 456 - Global Climate Change
C. Select one course:

EEB 484 - Conservation Biology
GEOG 436 - Water Resources
D. Complete 3 hours:

GEOL 493 - Independent Study
E. Complete 12 hours:
$300-l e v e l$ or above in one of the following departments:
Chemistry
Earth and Planetary Sciences
Ecology and Evolutionary Biology
Economics
Forestry, Wildlife, and Fisheries
Geography
Plant Sciences
Political Science
Sociology

## ADD GEOLOGY AND ENVIRONMENTAL STUDIES MAJOR-HONORS ENVIRONMENTAL STUDIES CONCENTRATION

## Honors Concentration

Students who have completed five upper-division courses in either the Geology or Environmental Studies concentration, and maintain a cumulative GPA of at least 3.25 , are encouraged to pursue an honors concentration. In addition to fulfilling all requirements for their preferred concentration, an honors concentration requires 3 hours of GEOL 491, GEOL 492, or GEOL 493; 3 hours of GEOL 497 during which students will complete written and oral presentation of thesis results; and an additional 9 hours of honors coursework (including honors-by-contract). A GPA of at least 3.25 must be maintained throughout matriculation. Interested students should consult their academic advisor for details.

## $\diamond_{\text {ADD }}$ ENVIRONMENTAL STUDIES MINOR (MOVING FROM INTERDISCIPLINARY PROGRAMS DEPT)

The minor consists of 15 hours.

## Select 9 hours:

FWF 250 - Conservation
GEOL 202 - Earth as an Ecosystem: Modern Problems and Solutions
GEOL 206 - Sustainability: Reducing our Impact on Planet Earth
JREM 451 - Environmental Writing
SOCI 250 - Introduction to Global Studies

## Select one course:

GEOG 345 - Population and Environment
SOCI 360 - Environment and Resources

SOCI 465 - Social Values and the Environment

## Select one course:

AREC 315 - Agricultural and Environmental Law
AREC 470 - Policy Analysis for Environmental and Natural Resource Management
AREC 472 - Natural Resource Economics
ECON 362 - Environmental and Natural Resource Policy

## ADD SUSTAINABILITY MINOR (MOVING FROM INTERDISCIPLINARY PROGRAMS DEPT)

The minor consists of 15 hours.

## Complete:

GEOL 206 - Sustainability: Reducing our Impact on Planet Earth

## Select two courses:

AREC 315 - Agricultural and Environmental Law
AREC 470 - Policy Analysis for Environmental and Natural Resource Management
AREC- 472 - Natural Resource Economics
ECON 322 - The Global Economy: Trade and Development
ECON 362 - Environmental \& Natural Resource Policy

## Select two courses:

FWF 250 - Conservation
GEOG 345 - Population and Environment
SOCI 250 - Introduction to Global Studies
SOCI 360 - Environment and Resources

## DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY

## REVISE DEPARTMENT TEXT (ADD PARAGRAPH AT END)

Ecology and evolutionary biology deals with the interactions of organisms with one another and with their physical environment, and with the processes through which these interactions have developed and continue to change through time. The curriculum will provide students with an understanding of ecological interactions and evolutionary processes that are fundamental to the operation of the natural world. The scope of this program ranges from the molecular level, to individual organisms, to populations, communities, and ecosystems. The program offers career opportunities in academia, health sciences, industry, governmental and non-governmental agencies that are concerned with the importance and integrity of natural systems, and in education at all levels.

Students wishing to emphasize study in this area elect to major in biological sciences with a concentration in ecology and evolutionary biology. See the description of the major and concentration under Division of Biology for requirements.

Students pursuing a B.S. degree in the Department of Ecology and Evolutionary Biology are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or science and receive secondary education teaching licensure with the 4 -year undergraduate degree program through completion of a VolsTeach minor. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).

## DEPARTMENT OF GEOGRAPHY

## REVISE GEOGRAPHY MAJOR

Students who enter the major with more than 60 hours of credit, and who have completed a laboratory science sequence other than geography, may petition the department to substitute certain upper-division physical geography courses for GEOG 131/137 and/or GEOG 132. Students who enter the major with more than 60 hours of credit, and who have met the social science divisional requirements in departments other than geography, may petition the department to substitute certain upper-division human geography courses for GEOG 101 or GEOG 102.

## Prerequisites

Complete:
GEOG 131 - Geography of the Natural Environment I

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or
GEOG 137 - Honors: Geography of the Natural Environment I
and
GEOG 132 - Geography of the Natural Environment II
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## DEPARTMENT OF HISTORY

## REVISE HISTORY MAJOR—HONORS CONCENTRATION (INTRODUCTORY TEXT AND LAST SECTION)

The honors concentration consists of 33 hours. The honors concentration provides history majors the opportunity to work with a faculty mentor on an individualized research project. All declared history majors with an overall GPA of at least 3.25 are invited to participate in the honors concentration. A grade of B or above must be maintained in all honors courses, along with an overall GPA of 3.25. The Department of History offers honors sections of the western civilization, world civilization, and United States history survey courses. These honors courses are open to non-majors as well. Students interested in honors work at any level should consult the department's honors coordinator.

## Select one additional honors course:

any history honors course or history honors-by-contract course.

## DEPARTMENT OF INTERDISCIPLINARY PROGRAMS

## REVISE INTRODUCTORY PARAGRAPH

In keeping with the philosophy that integration of knowledge is as important as proficiency in a given field, the College of Arts and Sciences has combined resources of several departments to offer a series of interdisciplinary majors and minors. These programs are Africana Studies, American Studies, Asian Studies, Cinema Studies, Comparative Literature, Environmental Studies, Global Studies, Judaic Studies, Latin American Studies, Linguistics, Medieval Studies, and Women's Studies.

DROP (MOVING TO EARTH AND PLANETARY SCIENCES DEPT): INTERDISCIPLINARY PROGRAMS MAJOR—ENVIRONMENTAL STUDIES CONCENTRATION ENVIRONMENTAL STUDIES MINOR SUSTAINABILITY MINOR

## REVISE INTERDISCIPLINARY PROGRAMS MAJOR—AFRICANA STUDIES CONCENTRATION

## Section II.

## Select 3 hours:

- Revise AFST 160 162-Art of Africa, Oceania, and Pre-Columbian America
- Revise AFST 464461 - Art of Southern and Eastern Africa
- Revise AFST 465462 - Art and Archaeology of Ancient Africa
- Revise AFST 466463 - Arts of the African Diaspora
- Revise AFST 471470 - African-American Art


## Section III.

## Select 12 hours:

- Revise AFST 464461 - Art of Southern and Eastern Africa
- Revise AFST 465462 - Art and Archaeology of Ancient Africa
- Revise AFST 466463 - Arts of the African Diaspora
- Revise AFST 471470 - African-American Art

REVISE AFRICANA STUDIES MINOR

## Select 9 hours:

- Revise AFST 464461 - Art of Southern and Eastern Africa
- Revise AFST 465462 - Art and Archaeology of Ancient Africa
- Revise AFST 466463 - Arts of the African Diaspora
- Revise AFST 471470 - African-American Art

REVISE INTERDISCIPLINARY PROGRAMS MAJOR-AMERICAN STUDIES CONCENTRATION (SECTION FIVE)
Select three courses:

- Revise AFST 471470 - African-American Art
- Revise ARTH AHIS 470 - African-American Art
- Revise ARTH AHIS 472 - History of 20th-Century American Art
- Revise ARTH AHIS 473-19th-Century American Art


## REVISE AMERICAN STUDIES MINOR

Select 12 hours (from at least two different disciplines):

- Revise AFST 471470 - African-American Art
- Revise ARTH AHIS 470 - African-American Art
- Revise ARTH AHIS 472 - History of 20th-Century American Art
- Revise ARTH AHIS 473-19th-Century American Art

REVISE INTERDISCIPLINARY PROGRAMS MAJOR-ASIAN STUDIES CONCENTRATION
SECTION I. CHINA, SECTION II
Select 6 hours (Subdivision A):

- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries


## SECTION I. CHINA, SECTION IV

Select 6 hours (other geographical-cultural area):

- Revise ARTH AHIS 411 - Art of South and Southeast Asia
- Revise ARTH AHIS 419 - Art of Japan


## SECTION I. CHINA, SECTION V

## Select 8 remaining hours:

- Revise ARTH AHIS 411 - Art of South and Southeast Asia
- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries
- Revise ARTH AHIS 419 - Art of Japan


## SECTION II. ISLAMIC WORLD SECTION IV

## Select 6 hours (other geographical-cultural area):

- Revise ARTH AHIS 411 - Art of South and Southeast Asia
- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries
- Revise ARTH AHIS 419 - Art of Japan

SECTION II. ISLAMIC WORLD, SECTION $V$

## Select 8 remaining hours:

- Revise ARTH AHIS 411 - Art of South and Southeast Asia
- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries
- Revise ARTH AHIS 419 - Art of Japan


## SECTION III. JAPAN, SECTION II

## Select 6 hours (Subdivision A):

- Revise ARTH AHIS 419 - Art of Japan


## SECTION III. JAPAN, SECTION IV

## Select 6 hours (other geographical-cultural area):

- Revise ARTH AHIS 411 - Art of South and Southeast Asia
- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries


## SECTION III. JAPAN, SECTION V

## Select 8 remaining hours:

- Revise ARTH AHIS 411 - Art of South and Southeast Asia
- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries
- Revise ARTH AHIS 419 - Art of Japan


## SECTION IV. SOUTH ASIA, SECTION II

## Select 6 hours (Subdivision A):

- Revise ARTH AHIS 411 - Art of South and Southeast Asia


## SECTION IV. SOUTH ASIA, SECTION IV

## Select 6 hours (other geographical-cultural area):

- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries
- Revise ARTH AHIS 419 - Art of Japan


## SECTION IV. SOUTH ASIA, SECTION V

## Select 8 remaining hours:

- Revise ARTH AHIS 411 - Art of South and Southeast Asia
- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries
- Revise ARTH AHIS 419 - Art of Japan


## REVISE ASIAN STUDIES MINOR

## SECTION I. CHINA, SECTION I

Select 6 hours (Subdivision A):

- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries


## SECTION I. CHINA, SECTION III

## Select 3 hours (other geographical-cultural area):

- Revise ARTH AHIS 411 - Art of South and Southeast Asia
- Revise ARTH AHIS 419 - Art of Japan

SECTION II. ISLAMIC WORLD, SECTION III
Select 3 hours (other geographical-cultural area):

- Revise ARTH AHIS 411 - Art of South and Southeast Asia
- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries
- Revise ARTH AHIS 419 - Art of Japan

SECTION III. JAPAN, SECTION I

## Select 6 hours (Subdivision A):

- Revise ARTH AHIS 419 - Art of Japan

SECTION III. JAPAN, SECTION III

## Select 3 hours (other geographical-cultural area):

- Revise ARTH AHIS 411 - Art of South and Southeast Asia
- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries


## SECTION IV. SOUTH ASIA, SECTION I

## Select 6 hours (Subdivision A):

- Revise ARTH AHIS 411 - Art of South and Southeast Asia

SECTION IV. SOUTH ASIA, SECTION III
Select 3 hours (other geographical-cultural area):

- Drop AHIS 415 - Art of China
- Add ARTH 413 - Art of China I
- Add ARTH 414 - Art of China II
- Revise ARTH AHIS 416 - Chinese Art of the $20^{\text {th }}$ and $21^{\text {st }}$ Centuries
- Revise ARTH AHIS 419 - Art of Japan


## REVISE CINEMA STUDIES MINOR, SECTION II

## Select 3 hours:

- Revise CNST 233235 - Introduction to Cinematography as Art
- Revise CNST 234236 - Introduction to Video Art

REVISE INTERDISCIPLINARY PROGRAMS MAJOR—COMPARATIVE LITERATURE CONCENTRATION
Select 9 hours (300-level literature in a foreign language):

- Drop FREN 351, FREN 352, FREN 412, FREN 414
- Add FREN 353


## Select 9 hours (300-level literature):

- Drop FREN 351, FREN 352, FREN 412, FREN 414
- Add FREN 353

REVISE COMPARATIVE LITERATURE MINOR
Select 6 hours (300-400 level literature in a foreign language):

- Drop FREN 351, FREN 352, FREN 412, FREN 414
- Add FREN 353


## Select 6 hours (from different department):

- Drop FREN 351, FREN 352, FREN 412, FREN 414
- Add FREN 353


## REVISE INTERDISCIPLINARY PROGRAMS MAJOR—GLOBAL STUDIES CONCENTRATION

## Track I-Global Society and Culture

- Revise PHIL 441393 - Global Justice and Human Rights

Track II - Global Politics and Economy

- Revise PHIL 441393 - Global Justice and Human Rights
- Revise AGEC AREC 420 - International Agricultural Trade and Marketing

Option II:

- Drop FREN 351, FREN 352, FREN 412, FREN 414
- Add FREN 353


## REVISE GLOBAL STUDIES MINOR (TRACKS I AND II)

## Track I-Global Society and Culture

- Revise PHIL 441393 - Global Justice and Human Rights


## Track II-Global Politics and Economy

- Revise PHIL 441393 - Global Justice and Human Rights
- Revise AGEG AREC 420 - International Agricultural Trade and Marketing


## REVISE INTERDISCIPLINARY PROGRAMS MAJOR—JUDAIC STUDIES CONCENTRATION

## SECTION II

## Select 12 hours:

- Revise REST 311 - Introduction to the Hebrew Bible Ancient Hebraic Religious Traditions

SECTION III

## Select 9 hours:

- Revise ARTH AHIS 425 - Early Christian and Byzantine Art to 1350
- Revise ARTH AHIS 431 - Medieval Art of the West, 800-1400
- Revise ARTH AHIS 475 - History of $19^{\text {th }}$-Century Painting and Sculpture in Europe

REVISE INTERDISCIPLINARY PROGRAMS MAJOR—LANGUAGE AND WORLD BUSINESS CONCENTRATION—CHINESE

## II. Professional Emphasis

## A. International Business-25 $\mathbf{2 6}$ hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
B. International Retail Merchandising-25 26 hours
- Revise MGT BUAD 201 - Introduction to Business Management Business Functions


## C. International Agricultural Economics-24 25 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
- Revise ARECAGEG 320 - Microeconomics of Agriculture, Food and Resources
- Revise AREC AGEC 342 - Farm Business Management
- Revise AREC AGEC 350 - The Food and Agricultural Marketing System
- Revise AREC AGEC 420 - International Agricultural Trade and Marketing
- Revise AREC AGEG 430 - Food and Agricultural Policy


## II. Professional Emphasis

## A. International Business-25 26 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
B. International Retail Merchandising-25 26 hours
- Revise MGT BUAD 201 - Introduction to Business Management-Business Functions
C. International Agricultural Economics-24 25 hours
- Revise MGT BUAD 201 - Introduction to Business Management-Business Functions
- Revise AREC AGEG 320 - Microeconomics of Agriculture, Food and Resources
- Revise AREC AGEC 342 - Farm Business Management
- Revise AREC AGEC 350 - The Food and Agricultural Marketing System
- Revise AREC AGEC 420 - International Agricultural Trade and Marketing
- Revise AREC AGEC 430 - Food and Agricultural Policy

REVISE INTERDISCIPLINARY PROGRAMS MAJOR—LANGUAGE AND WORLD BUSINESS CONCENTRATION— PORTUGUESE
I. Language Requirement
B. Select 9 hours:

- Drop PORT 490 - Internship


## II. Professional Emphasis

A. International Business-25 26 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
B. International Retail Merchandising-25 26 hours
- Revise MGT BUAD 201 - Introduction to Business Management Business Functions


## C. International Agricultural Economics-24 25 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
- Revise AREC AGEG 320 - Microeconomics of Agriculture, Food and Resources
- Revise AREC AGEG 342 - Farm Business Management
- Revise AREC AGEC 350 - The Food and Agricultural Marketing System
- Revise AREC AGEC 420 - International Agricultural Trade and Marketing
- Revise AREC AGEC 430 - Food and Agricultural Policy


## The Arts

- Revise ARTH AHIS 425 - Early Christian and Byzantine Art to 1350
- Revise ARTH AHIS 431 - Medieval Art of the West, 800-1400
- Revise ARTH AHIS 441 - Northern European Painting, 1350-1600
- Revise ARTH AHIS 451 - The Art of Italy, 1250-1450


## DEPARTMENT OF MATHEMATICS

## REVISE DEPARTMENT TEXT (ADD PARAGRAPH AT END)

All entering freshmen and all other students who have not completed a college level mathematics course, except students who have received AP calculus credit, must take UT Knoxville's Mathematics Placement Exam before enrolling in a mathematics course. Placement in the appropriate course will be determined by the score on the exam. Ordinarily, a student will not be allowed to enroll in a course at a level above that determined by his or her placement exam score. In exceptional circumstances, students will have the right to appeal their placement to the Mathematics Department. The exam will be administered during summer orientation and at designated times during the fall, spring, and summer registration.

[^1]REVISE MATHEMATICS MAJOR, SAMPLE PROGRAMS (REVISE TEXT AND DROP SECONDARY EDUCATION SHOWCASE)
SAMPLE PROGRAMS
There are many careers one can pursue with a mathematics major. Sample programs for three two different goals are listed below. Additional information is available in the Department of Mathematics office.

## DEPARTMENT OF MICROBIOLOGY

## REVISE DEPARTMENT TEXT (ADD PARAGRAPH AT END)

Microbiology is the study of organisms so small that they must be viewed with a microscope. These organisms include bacteria, yeasts, molds, protozoa and viruses. Microbiology is one of the fastest growing areas of science. The concentration in microbiology is designed to furnish necessary experience in academic and practical skills to prepare graduates for immediate entry into the job market or for continuing graduate education in pure or applied biological sciences. Graduates with a concentration in microbiology find positions in the areas of medical, agricultural, food, industrial, or pharmaceutical microbiology. In addition, many microbiologists pursue careers in environmental microbiology and bioremediation. Other students become teachers, science writers, technical librarians, or managers of scientific companies. The microbiology concentration also provides an excellent background for students who plan to enter medical school, veterinary school or other health science graduate programs.

Students wishing to emphasize study in this area elect to major in biological sciences with a concentration in microbiology. See the description of the biological sciences major, microbiology concentration for requirements.

Students pursuing a B.S. degree in the Department of Microbiology are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or science and receive secondary education teaching licensure within the 4-year undergraduate degree program through completion of a VolsTeach minor. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).

## DEPARTMENT OF MODERN FOREIGN LANGUAGES AND LITERATURES

## REVISE FRENCH MAJOR—LANGUAGE AND WORLD BUSINESS CONCENTRATION

## II. Professional Emphasis

A. International Business-25 26 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
B. International Retail Merchandising-25 26 hours
- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
C. International Agricultural Economics-24 25 hours
- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
- Revise AREC AGEG 320 - Microeconomics of Agriculture, Food and Resources
- Revise AREC AGEG 342 - Farm Business Management
- Revise AREC AGEC 350 - The Food and Agricultural Marketing System
- Revise AREC AGEC 420 - International Agricultural Trade and Marketing
- Revise AREC AGEC 430 - Food and Agricultural Policy

REVISE GERMAN MAJOR—LANGUAGE AND WORLD BUSINESS CONCENTRATION
I. Language Requirement
C. Select three courses:

- Drop GERM 490 - Internship
II. Professional Emphasis
A. International Business-25 26 hours
- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
B. International Retail Merchandising-25 26 hours
- Revise MGT BUAD 201 - Introduction to Business Management Business Functions


## C. International Agricultural Economics-24 25 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
- Revise AREC AGEC 320 - Microeconomics of Agriculture, Food and Resources
- Revise AREC AGEC 342 - Farm Business Management
- Revise AREC AGEC 350 - The Food and Agricultural Marketing System
- Revise AREC AGEG 420 - International Agricultural Trade and Marketing
- Revise AREC AGEG 430 - Food and Agricultural Policy


## REVISE ITALIAN MAJOR—LANGUAGE AND WORLD BUSINESS CONCENTRATION

I. Language Requirement
B. Select 12 hours:

- Drop ITAL 490 - Internship


## II. Professional Emphasis

A. International Business-25 26 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
B. International Retail Merchandising-25 $\mathbf{2 6}$ hours
- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
C. International Agricultural Economics-24 25 hours
- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
- Revise AREC AGEG 320 - Microeconomics of Agriculture, Food and Resources
- Revise AREC AGEG 342 - Farm Business Management
- Revise AREC AGEG 350 - The Food and Agricultural Marketing System
- Revise AREC AGEC 420 - International Agricultural Trade and Marketing
- Revise AREC AGEC 430 - Food and Agricultural Policy

REVISE RUSSIAN MAJOR—LANGUAGE AND WORLD BUSINESS CONCENTRATION
I. Language Requirement
B. Select 9 hours:

- Drop RUSS 490 - Internship
II. Professional Emphasis
A. International Business-25 26 hours
- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
B. International Retail Merchandising-25 26 hours
- Revise MGT BUAD 201 - Introduction to Business Management Business Functions


## C. International Agricultural Economics-24 25 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
- Revise AREC AGEG 320 - Microeconomics of Agriculture, Food and Resources
- Revise AREC AGEG 342 - Farm Business Management
- Revise AREC AGEC 350 - The Food and Agricultural Marketing System
- Revise AREC AGEC 420 - International Agricultural Trade and Marketing
- Revise AREC AGEC 430 - Food and Agricultural Policy


## REVISE SPANISH MAJOR—LANGUAGE AND WORLD BUSINESS CONCENTRATION

## I. Language Requirement

D. Select two 300-400 level language, literature, or culture courses:

- Drop SPAN 490 - Internship
E. Select two 400-level language, literature, or culture courses:
- Drop SPAN 490 - Internship
II. Professional Emphasis


## A. International Business-25 26 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions


## B. International Retail Merchandising-25 26 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions


## C. International Agricultural Economics-24 25 hours

- Revise MGT BUAD 201 - Introduction to Business Management Business Functions
- Revise AREC AGEG 320 - Microeconomics of Agriculture, Food and Resources
- Revise AREC AGEC 342 - Farm Business Management
- Revise AREC AGEC 350 - The Food and Agricultural Marketing System
- Revise AREC AGEC 420 - International Agricultural Trade and Marketing
- Revise AREC AGEC 430 - Food and Agricultural Policy


## SCHOOL OF MUSIC

REVISE MUSIC MAJOR—MUSIC EDUCATION CONCENTRATION—VOCAL-GENERAL/KEYBOARD EMPHASIS

## First Year

ENGL 101*, ENGL 102*
Hours Credit

Music Performance (100-level Keyboard) (2,2) 4
MUPF 155, MUPF 156 or MUVC $110 \quad 2$
MUSC $200(0,0) \quad 0$
MUEN 330; or MUEN 380; or MUEN 383 or MUEN 389 2
MUTH 110, MUTH $120 \quad 6$
MUTH 130, MUTH 140 2
MUCO 110* 3
MUED 240 or MUED 241 1

## Second Year

${ }^{2}$ Cultures and Civilizations* 6
CFS 210* 3
Music Performance (200-level Keyboard) (2,2) 4
MUPF 155, MUPF 156 or MUPF 255, MUPF 256 (Voice) 2
MUSC $200(0,0) \quad 0$
MUEN 330; or MUEN 380; or MUEN 383 or MUEN 389 2
MUTH 210, MUTH 220 6
MUTH 230, MUTH 240 2
MUCO 210*, MUCO 220* 6
MUED 200 1
MUED 201 1

## Third Year

${ }^{3}$ Natural Sciences* 4
MATH 115* 3
Music Performance (200- or 300-level Keyboard) (2, 2) 4
MUSC $200(0,0) \quad 0$
MUEN 330; or MUEN 380; or MUEN 383 or MUEN 3892
MUEN 399 2
MUEN 340 ( 1
MUTH 450 2
MUCO 380* 3
MUED 210 or MUED 211 1
MUED 251 1
MUED 310, MUED $320(3,2) \quad 5$
MUVC 450 2
MUED 350 - 1
TPTE 486 3
Fourth Year
${ }^{4}$ Social Sciences 3
${ }^{3}$ Natural Sciences* 3
${ }^{5}$ Quantitative Reasoning* 3
Music Performance (300 or 400 level) 2
MUSC 200 0
MUEN 330; or MUEN 380; or MUEN 383 or MUEN 3891

| MUED 200 | 1 |
| :--- | :--- |
| MUED 330 | 3 |
| MUED 340 | 3 |
| MUED 350 | 1 |
| MUED-420 | 3 |
| MUED 430 | 3 |
| MUSC 301 | 3 |
| EDPY 401 | 0 |
| SPED 402 | 3 |

ENGL 101*, ENGL 102*
${ }^{1}$ Communicating Orally*
Music Performance (100-level Voice) (2,2) 4
MUKB 110, MUKB 120 2
MUSC $200(0,0)$
MUEN 330 or MUEN 380 or MUEN 383 or MUEN $389(1,1)$
${ }^{2}$ Music Ensemble (1,1) z
MUTH 110, MUTH $120 \quad 6$
MUTH 130, MUTH 140 2
MUCO 110* 3
MUED 240 or MUED 241 1
Second Year
${ }^{23}$ Cultures and Civilizations* 6
CFS 210* 3
Music Performance (200-level Voice) (2,2) 4
MUKB 210, MUKB 220 2
MUSC $200(0,0) \quad 0$
MUEN 330 or MUEN 380 or MUEN 383 or MUEN $389(1,1)$
${ }^{2}$ Music Ensemble (1,1) Z
MUTH 210, MUTH 220 6
MUTH 230, MUTH 240 2
MUCO 210*, MUCO 220* 6
MUED 200 1
MUED 201
1

Third Year
${ }^{34}$ Natural Sciences* 4
MATH 115* 3
Music Performance (200- or 300-level Voice) $(2,2) \quad 4$
MUSC $200(0,0) \quad 0$
MUEN 330 or MUEN 380 or MUEN 383 or MUEN 389 (1,1) 2
${ }^{\text {Z }}$ Music Ensemble ( 1,1 ) Z
MUEN 340 1
MUTH 450 2
MUCO 380* 3
MUED 210 or MUED 211 1
MUED 250,-MUED 251 2
MUED 310, MUED 320 5
MUED 350 1
MUVC 450 2
TPTE 486 3
Fourth Year
${ }^{5}$ Social Sciences
${ }^{34}$ Natural Sciences* 3
${ }^{56}$ Quantitative Reasoning* 3
Music Performance (300 or 400 level Voice) 2
MUSC 200
MUEN 330 or MUEN 380 or MUEN 383 or MUEN $389(1,1)$
${ }^{2}$ Ausic Ensemble (1,1) Z
MUED 200 —
MUED 330 3

| MUED 340 | 3 |
| :--- | :--- |
| MUED 350 | 1 |
| MUED 420 | 3 |
| MUED 430 | 3 |
| MUSC 301 | 0 |
| EDPY 401 | 3 |
| SPED 402 | 3 |

* Meets University General Education Requirement
** Teacher licensure requires a fifth-year graduate internship or one semester of student teaching.
1 See Communicating Orally list - University General Education Requirement. Select one course from the list.
²-Choose from MUEN 380-Concert Choir, MUEN 330-Chamber Singers, MUEN 383-Men's Chorale, MUEN 389 - Women's Ghorale.
${ }^{23}$-See Cultures and Civilizations list - University General Education Requirement. Select two courses on the list or two courses in a foreign language at the intermediate level.
${ }^{34}$-See Natural Sciences list - University General Education Requirement. Select two courses from the list. At least one of the courses must have a laboratory.
${ }^{45}$-See Social Sciences list - University General Education Requirement.
${ }^{56}$-See Quantitative Reasoning list - University General Education Requirement.


## REVISE MUSIC MAJOR, BM—THEORY/COMPOSITION CONCENTRATION (FOOTNOTE 4)

${ }^{4}$ Areas of Study
OPTION A - COMPOSITION: MUPF 394, MUPF 395, MUPF 494, MUPF 495, MUSC 411.
OPTION B - ELECTRONIC COMPOSITION: MUPF 396, MUPF 496, MUSC 411.
OPTION C - MUSIC THEORY: MUPF 394, MUPF 395 or 396, MUTH 493, Music Theory Musicology elective (300 level and above).

REVISE MUSIC MINOR—MUSIC THEORY

## Minor Requirements

The minor concentration in Music Theory consists of 1525 hours in courses numbered 200 or above.

## Prerequisites (8 hours)

## Complete:

MUTH 110 - Theory I
MUTH 120 - Theory II
MUTH 130 - Ear Training I
MUTH 140 - Ear Training II

## Required Courses (11 hours)

## Complete:

MUTH 210 - Theory III
MUTH 220 - Theory IV
MUTH 230 - Advanced Ear Training III
MUTH 240 - Advanced Ear Training IV
MUTH 310 - Form and Analysis

## Electives

Select 6 hours:
any 300 or 400 level Music Theory courses

## Select 4 hours:

any Music Education courses 200-499
any Music Ensemble courses 200-499
any Music General courses 200-499
any Music Instrumental courses 200-499
MUJZ 110, MUJZ 120, or any courses 200-499
any Music Keyboard courses 200-499
any Music Performance courses 200-499
any Music Technology courses 200-499
any Music Theory courses 320-499
any Music Voice courses 200-499
any Musicology courses 200-499

DROP MUSIC MINOR—MUSICOLOGY
ADD MUSIC MINOR—MUSIC-MUSIC AND CULTURE
Minor Requirements
The minor concentration in music \& culture consists of 23 hours in courses numbered 200 and above.

## Prerequisites

## A. Select one course:

MUTH 100 - Fundamentals of Music
MUTH 105 - Introduction to Music Theory

## B. Select one course:

MUCO 110 - Introduction to Music in Western Culture
MUCO 115 - Music in the United States
MUCO 120 - History of Rock
MUCO 125-Jazz in American Culture

## Required Courses

## A. Complete:

MUCO 290 - Soundscapes: Exploring Music in a Changing World

## B. Select one course:

MUCO 210 - History of Western Music, Ancient to the Baroque
MUCO 220 - History of Western Music, Classical to the Present

## C. Select 9 hours:

MUCO 200 - Introduction to Music Literature
MUCO 210 - History of Western Music, Ancient to the Baroque
MUCO 220 - History of Western Music, Classical to the Present
MUCO 310 - Introduction to African-American Music
MUCO 330 - Women in Music
MUCO 340 - Contemporary Trends in American Church Music I
MUCO 341 - Contemporary Trends in American Church Music II
MUCO 350 - History of Jazz
MUCO 380 - Music in World Cultures
MUCO 400 - Music History Survey
MUCO 410 - Studies in Genre
MUCO 420 - History of Opera
MUCO 430 - History of the Symphony
MUCO 450 - Composer Seminar
MUCO 460 - Music Aesthetics
MUCO 480 - Music in Christian Worship
MUCO 493 - Independent Study

## D. Select 2 hours:

any 200-level applied music courses, or music ensemble, or class performance experience chosen from the following:
Applied Music (Music Performance 200 or higher) \& Solo Class (Music Gen 200) $0(0,0)$
Small Jazz Ensemble (Music Ensemble 303)
Jazz Ensemble (Music Ensemble 304)
Studio Orchestra (Music Ensemble 305)
Chamber Music Ensemble (Music Ensemble 315)
UT Singers (Music Ensemble 320)
Chamber Singers (Music Ensemble 330)

Opera Theater (Music Ensemble 340)
Concert Band (Music Ensemble 350)
Symphonic Band (Music Ensemble 352)
Wind Ensemble (Music Ensemble 353)
Symphony Orchestra (Music Ensemble 370)
Concert Choir (Music Ensemble 380)
Men's Chorale (Music Ensemble 383)
Women's Chorale (Music Ensemble 389)
Jazz Piano I (Music Jazz 130, 1)
Jazz Improvisation I (Music Jazz 210, 2)

## DEPARTMENT OF PHILOSOPHY

REVISE PHILOSOPHY MAJOR
PROGRAM TEXT
The major consists of 2427 hours of courses numbered 200 or above, including at most one of Philosophy 374,376, or 379. Majors are required to discuss their programs with a member of the philosophy faculty.

## Corequisites

Select one course Complete:
PHIL 130-Critical Thinking
PHIL 135 - Formal Logic
I. Select one course from each area:
C. Ethics

PHIL 340 - Ethical Theory
PHIL 347 - Honors: Ethical Theory
PHIL 440 - Contemporary Ethical Theory
D. Epistemology, Metaphysics, Logic

PHIL 360 - Philosophy of Science
PHIL 370 - Philosophy of Religion
PHIL 371 - Epistemology
PHIL 372 - Metaphysics
PHIL 373 - Philosophy of Mind
PHIL 435 - Intermediate Formal Logic
II. Select one three additional courses:

200-level or above philosophy course
III. Select two one additional courses:

300 -level or above philosophy courses
IV. Select two one additional courses:

400 -level or above philosophy courses

REVISE PHILOSOPHY MAJOR—HONORS CONCENTRATION
I. Select one course from each area
D. Epistemology, Metaphysics, Logic

PHIL 360 - Philosophy of Science
PHIL 370 - Philosophy of Religion
PHIL 371 - Epistemology
PHIL 372 - Metaphysics
PHIL 373 - Philosophy of Mind
PHIL 435 - Intermediate Formal Logic
II. Complete A, B, and C below:
A. Select one three additional courses:

200-level or above philosophy course

B. Select two one additional courses:<br>300 -level or above philosophy courses<br>C. Select two one additional courses:<br>400 -level or above philosophy courses

## DEPARTMENT OF PHYSICS AND ASTRONOMY

## REVISE DEPARTMENT TEXT (ADD PARAGRAPH AT END)

Physics is the study of matter and energy and their interactions from microscopic to macroscopic regimes. It is the most fundamental physical science in the sense that the laws of physics form the foundation of all natural sciences. The undergraduate physics major provides a thorough introduction to the core areas of physics while offering students flexibility to pursue special interests through our academic, applied, or general concentrations. The academic concentration is intended for students interested in professional employment or graduate work in physics or closely related fields such as astronomy, engineering, laser technology, or computational science. The applied concentration introduces students to the physics and technology of today and tomorrow. Such a broad physics background is increasingly useful in technological and industrial fields outside of physics. The astronomy concentration is designed for students who may wish to do graduate work in astronomy or astrophysics. The general concentration is intended for students who wish to apply a substantial knowledge of physics to fields such as secondary education, medicine, law, journalism, business, or any field of their choice.

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Students pursuing a B.S. degree in the Department of Physics and Astronomy are eligible to participate in the University's
VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or
science and receive secondary education teaching licensure within the 4-year undergraduate degree program through completion of
a VolsTeach minor. For more information about VolsTeach, including advising associated with teaching licensure requirements,
contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).
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## ADD 5-YEAR BS WITH PHYSICS MINOR-MS PROGRAM

## Five-Year BS with Physics Minor-MS Program

Qualified students completing a BS degree from a department of the College of Engineering or the College of Arts and Sciences may add a physics minor by completing the requirements listed below. Six hours of 400 -level courses required for a minor in physics combined with a BS engineering degree may be applied toward a master's degree (project option or non-thesis option) in physics during a fifth year following the award of the BS. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for an undergraduate program. Significant components of the program are:

- Students must have an overall GPA of 3.4 in required course work. Conditional admission may be granted after completing the required 100 - and 200 -level requirements for the minor while full admission is granted after enrolling in the final semester of courses required for all BS and minor course requirements with a minimum overall GPA of 3.4.
- Students must at least be conditionally admitted to the program prior to taking graduate courses for both their minor and master's degree. All courses taken for graduate credit must be approved by the graduate program director. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit.
- Students admitted to the program must also follow the normal procedure for admission to the Graduate School. Admission of students into this program must be approved by the department and the Graduate School. Students will not be eligible for assistantships until they are enrolled as graduate-level students in the Graduate School.


## Minor Requirements

The physics minor component of the 5 -year physics minor-master's program consists of 24 to 31 hours.
Complete A, B, or C below:
A.

EF 151 or EF 157 - Physics for Engineers I
EF 152 or EF 158 - Physics for Engineers II
PHYS 231 - Fundamentals of Physics: Electricity and Magnetism
PHYS 232 - Fundamentals of Physics: Wave Motion, Optics, and Modern Physics
B.

PHYS 135 - Introduction to Physics for Physical Science and Mathematics Majors I
PHYS 136 - Introduction to Physics for Physical Science and Mathematics Majors II
C.

PHYS 137 - Honors: Fundamentals of Physics for Physics Majors I

PHYS 138 - Honors: Fundamentals of Physics for Physics Majors II

## Complete:

PHYS 250 - Fundamentals of Physics: Modern Physics
PHYS 311 - Mechanics
PHYS 432 - Electricity and Magnetism

## Select one course:

PHYS 312 - Mechanics
PHYS 341 - Introduction to Nuclear Physics

## Select one course:

PHYS 431 - Electricity and Magnetism
ECE 341 - Fields

# COLLEGE OF BUSINESS ADMINISTRATION 

## All changes effective Fall 2011

## PART I. COURSE CHANGES

## (205) (BUAD) Business Administration

## ADD

242 Business Software Applications (2) Instruction on the use of widely used spreadsheet and database software. Includes, via hands-on activities, the use of the many features contained in these two software applications with emphasis on how and when to apply these features to address a variety of business problems.
(RE) Prerequisite(s): Accounting 200 and Economics 201 or 207.
(RE) Corequisite(s): Statistics 201 or 207.
Registration Restriction(s): Majors in the College of Business Administration.

DROP
201 Business Functions (4)
207 Honors: Business Functions (4)

## REVISE DESCRIPTION, ADD REGISTRATION RESTRICTION

100 Approaches to the College of Business Administration (1) Integration into the College of Business Administration with emphasis on academic and career planning, college success strategies, and professional development.
Registration Restriction(s): Majors in the College of Business Administration.
Formerly: Integration into the College of Business Administration with emphasis on academic advising, major exploration, career planning, university resources and services, and reinforcement of academic survival skills such as time management and study skills.

320 Business Career Planning and Placement (1)
Formerly: Grading Restriction: Satisfactory/No Credit grading only.

## REVISE (RE) PREREQUISITE

331 CBM I: Supply Chain Management (2)
(RE) Prerequisite(s): Management 201 or 207.
Formerly: (RE) Prerequisite(s): 201.
332 CBM I: Demand Management (2)
(RE) Prerequisite(s): Management 201 or 207.
Formerly: (RE) Prerequisite(s): 201.

337 Honors: CBM I: Supply Chain Management (2)
(RE) Prerequisite(s): Management 201 or 207.
Formerly: (RE) Prerequisite(s): 201.
338 Honors: CBM I: Demand Management (2)
(RE) Prerequisite(s): Management 201 or 207.
Formerly: (RE) Prerequisite(s): 201.

## 341 CBM II: Lean Operations (2)

(RE) Prerequisite(s): 242 with grade of C or better and Management 201 or 207.
Formerly: (RE) Prerequisite(s): 201.

342 CBM II: Information Management (2)
(RE) Prerequisite(s): 242 with grade of C or better and Management 201 or 207.
Formerly: (RE) Prerequisite(s): 201.

## 361 The Firm in a Global Context (3)

(RE) Prerequisite(s): Management 201 or 207.
Formerly: (RE) Prerequisite(s): 201.

## (583) (IB) International Business

## ADD

## 492 Off-Campus Study (1-15)

Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 15 hours.
Comment(s): Students must be admitted to an international business collateral or concentration.
Registration Restriction(s): Majors in the College of Business Administration.
Registration Permission: Consent of instructor.

DROP
419 International Environment and Management (3)

## REVISE DESCRIPTION

469 International Accounting (3) A study of factors affecting international business operations from a financial accounting and managerial control viewpoint. Topics include the influence of cultural values on the theory and practice of accounting, analysis of financial information stated in foreign currencies, harmonization of accounting standards, tax regulations, and transfer pricing. The course emphasizes the use of accounting information in management decision making.
Formerly: International accounting topics including but not limited to International Accounting Standards Board (IASB), International Financial Reporting Standards (IFRS), convergence of US standards with international standards, international taxation, and other issues relating to international and multinational accounting and reporting.

## REVISE DESCRIPTION, ADD REPEATABILITY

459 International Competition and Performance (3) Explores U.S. and global competitors to understand why individuals and firms behave differently and pursue different functional and/or competitive strategies, with varying performance outcomes. Focus on global challenges and local conditions and evaluate organizational actions to compete.
Repeatability: May be repeated. Maximum 6 hours.
Formerly: Explores how globalization affects the strategic management of firms. Focus on firm strategies, processes and performance outcomes within an industry context. Addresses issues such as the historic rise of manufacturing multinationals and challenges of recent global growth of service and retail enterprises. Topics include: measuring performance differences across competitors, how domestic defenders challenge multinationals, roll-up strategies to manage global growth, and leadership and structural challenges of global competition.

ADD REPEATABILITY
489 Study Abroad (0)
Repeatability: May be repeated 6 times.

## REVISE (RE) PREREQUISITE

## 439 Global Supply Chain Management (3)

(RE) Prerequisite(s): Business Administration 331 or 337 and Business Administration 361.
Formerly: (RE) Prerequisite(s): Business Administration 331 and Business Administration 361.

## DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT

## (216) (BULW) Business Law

REVISE CREDIT HOURS, DESCRIPTION, REVISE REGISTRATION RESTRICTION
301 Legal Environment of Business (2) Survey of legal and ethical topics affecting business. Coverage includes legal and business ethics; dispute resolution mechanisms; and substantive and procedural law of regulation, torts, contracts, property, business associations, and employer/employee relations.
Registration Restriction(s): Majors in the College of Business Administration or the College of Agricultural Sciences and Natural Resources and minimum of 45 completed credit hours.

Formerly: (3) Survey of legal and ethical topics affecting business. Coverage includes legal and business ethics; dispute resolution mechanisms; and substantive and procedural law of regulation, torts, contracts, property, intellectual property, business associations, and employer/employee relations. Registration Restriction(s): Minimum student level - junior.

## DEPARTMENT OF ECONOMICS

## (283) (ECON) Economics

```
ADD REPEATABILITY
300 Special Topics I
Repeatability: May be repeated. Maximum 9 hours.
400 Special Topics II
Repeatability: May be repeated. Maximum 9 hours.
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## REVISE (RE) PREREQUISITE

## 311 Intermediate Microeconomics (3)

(RE) Prerequisites: 201 or 207 and Statistics 201 or 207.
Formerly: (RE) Prerequisites: 201 and Statistics 201.

## 312 Managerial Economics (3)

(RE) Prerequisites: 201 or 207 and Statistics 201 or 207.
Formerly: (RE) Prerequisites: 201 and Statistics 201.

313 Intermediate Macroeconomics (3)
(RE) Prerequisites: 201 or 207 and Statistics 201 or 207.
Formerly: (RE) Prerequisites: 201 and Statistics 201.

## DEPARTMENT OF FINANCE

## (349) (FINC) Finance

## REVISE (RE) PREREQUISITE

300 Fundamentals of Finance (3)
(RE) Prerequisite(s): Management 201.
Formerly: (RE) Prerequisite(s): Business Administration 201.

301 Financial Management (3)
(RE) Prerequisite(s): Management 201.
Formerly: (RE) Prerequisite(s): Business Administration 201.

307 Honors: Financial Management (3)
(RE) Prerequisite(s): Management 207.
Formerly: (RE) Prerequisite(s): Business Administration 207.
402 Special Topics in Finance (3)
(RE) Prerequisite(s): 301 or 307 and Accounting 301 with grades of $C$ or better.
Formerly: (RE) Prerequisite(s): 301 and Accounting 301.
425 Investment and Portfolio Management (3)
(RE) Prerequisite(s): 301 or 307 and Accounting 301 with grades of $C$ or better. Formerly: (RE) Prerequisite(s): 301 and Accounting 301.

## 435 Financial Markets and Institutions (3)

(RE) Prerequisite(s): 301 or 307 and Accounting 301 with grades of $C$ or better. Formerly: (RE) Prerequisite(s): 301 and Accounting 301.

475 Insurance and Financial Planning Management (3)

Formerly: (RE) Prerequisite(s): 301 and Accounting 301.
485 Real Estate Finance and Investment Analysis (3)
(RE) Prerequisite(s): 301 or 307 and Accounting 301 with grades of $C$ or better.
Formerly: (RE) Prerequisite(s): 301 and Accounting 301.

## DEPARTMENT OF MANAGEMENT

## (530) (HRM) Human Resource Management

REVISE (RE) COREQUISITE
360 Managing Human Resources (3)
(RE) Corequisite(s): Business Administration 331 or 337 or Business Administration 341.
Formerly: (RE) Corequisite(s): Business Administration 331 or Business Administration 341.

DROP (RE) PREREQUISITE, ADD (RE) COREQUISITE
370 Acquiring Talent (3)
(RE) Corequisite(s): 360.
Formerly: (RE) Prerequisite(s): 360.

REVISE (RE) PREREQUISITE
480 Growing Talent (3)
(RE) Prerequisite(s): 360 with grade of $C$ or better.
Formerly: (RE) Prerequisite(s): 370.

485 Retaining Talent (3)
(RE) Prerequisite(s): 360 with grade of $C$ or better.
Formerly: (RE) Prerequisite(s): 370.

## (625) (MGT) Management

## ADD

201 Introduction to Business Management (3) Introduction to basic concepts of business, career options in business, and fundamentals of management, leadership, and organizational design.
(RE) Prerequisite(s): Accounting 200 and Economics 201 or 207.
(RE) Corequisite(s): Statistics 201 or 207.

207 Honors: Introduction to Business Management (3) This course introduces students to basic concepts of business, career options in business, and fundamentals of management, leadership, and organizational design. It is delivered through a combination of online learning, lectures and experiential assignments.
(RE) Prerequisite(s): Accounting 207 and Economics 207.
(RE) Corequisite(s): Statistics 207.
Comment(s): Admission to the College of Business Administration's Global Leadership Scholars Program is required.

REVISE TITLE, REVISE (RE) PREREQUISITE
435 Solving Complex Organizational Problems (3)
(RE) Prerequisite(s): 331 and Business Administration 353 or 357.
Formerly: 435 Solving Complex Business Problems (3)
(RE) Prerequisite(s): 331.

## REVISE DESCRIPTION, REVISE (RE) PREREQUISITE

300 Organizational Management (3) Advanced topics in management and organizations, which includes theory and practice related to negotiations, innovation and change, individual and group decision making, and human resource management.
(RE) Prerequisite(s): Management 201.

Formerly: The study of the theories of organizations and the practice of management within them. (RE) Prerequisite(s): Business Administration 201.

## REVISE (RE) PREREQUISITE

350 Introduction to Entrepreneurship (3)
(RE) Prerequisite(s): 331 or 337 or Engineering Fundamentals 337.
Formerly: (RE) Prerequisite(s): 331 or Engineering Fundamentals 337.

407 Honors: International Business Strategy (3)
(RE) Prerequisite(s): Business Administration 357 and Business Law 301.
Formerly: (RE) Prerequisite(s): Business Administration 353 and Business Law 301.

REVISE (RE) PREREQUISITE, ADD (RE) COREQUISITE
460 Leading Innovation and Change (3)
(RE) Prerequisite(s): 331 and Business Administration 353 or 357 or Engineering Fundamentals 337.
(RE) Corequisite(s): 451.
Formerly: (RE) Prerequisite(s): 331 or Engineering Fundamental 337.

## REVISE (RE) COREQUISITE

## 331 Leadership Skills (3)

(RE) Corequisite(s): Business Administration 331 or 337 or Business Administration 341.
Formerly: (RE) Corequisite(s): Business Administration 331 or Business Administration 341.

## 336 Foundations of Organizational Behavior (3)

(RE) Corequisite(s): Business Administration 353 or 357.
Formerly: (RE) Corequisite(s): Business Administration353.

REVISE TITLE, REVISE DESCRIPTION, REVISE (RE) PREREQUISITE, REVISE REGISTRATION RESTRICTION, DROP COMMENT

472 Managing People in the Global Environment (3) Critical knowledge and skills for understanding and managing people in dynamic global environments, examined from an organizational and interpersonal perspective. Topics include cultural differences in global business; communications, negotiations, and leadership in multi-cultural environments; and international human resource management.
(RE) Prerequisite(s): Management 201 or 207.
Registration Restriction(s): Students must be admitted to an international business collateral or dual concentration in the College of Business Administration or a major in language and world business in the College of Arts and Sciences.
Formerly: 472 International Human Resource Management (3)
Introduction to international human resource management from the perspective of the multinational firm. Topics include globalization and human resource strategy, understanding culture in the management of human resources, intercultural differences, selecting employees for international assignments, training and developing expatriate employees, and evaluation and compensation of employees in international assignments. (RE) Prerequisite(s): Business Administration 201.
Comment(s): For students in language and world business concentration in the College of Arts and Sciences (not for majors in the College of Business Administration).

## DEPARTMENT OF MARKETING AND LOGISTICS

## (626) (LOG) Logistics

REVISE (RE) PREREQUISITE
310 Intermediate Logistics (3)
(RE) Prerequisite(s): Business Administration 331 or 337.
Formerly: (RE) Prerequisite(s): Business Administration 331.

## (632) (MARK) Marketing

## REVISE (RE) PREREQUISITE

300 Marketing and Supply Chain Management (3)
(RE) Prerequisite(s): Management 201.
Formerly: (RE) Prerequisite(s): Business Administration 201.

340 Intermediate Marketing (3)
(RE) Prerequisite(s): Business Administration 332 or 338.
Formerly: (RE) Prerequisite(s): Business Administration 332.

350 Consumer Behavior (3)
(RE) Prerequisite(s): Business Administration 332 or 338.
Formerly: (RE) Prerequisite(s): Business Administration 332.
360 Marketing Analytics (3)
(RE) Prerequisite(s): Business Administration 332 or 338.
Formerly: (RE) Prerequisite(s): Business Administration 332.

## DEPARTMENT OF STATISTICS, OPERATIONS AND MANAGEMENT SCIENCE

## (738) (OMS) Operations and Management Science

ADD
331 Decision Analytics (3) Business modeling, deterministic decision models, simulation. (RE) Prerequisite(s): Business Administration 242 and Management 201 or 207.

DROP
341 Operations Management I (3)
421 Total Quality Management (3)
441 Operations Management II (3)

## (962) (STAT) Statistics

ADD
340 Experimental Methods and Process Improvement (3) Statistical methods for process improvement. Special/common cause model of variation directed towards understanding sources of variation affecting process operations. Strategies of process experimentation, including randomization, blocking, sequential experimentation, and replication. Use of statistical computing software.
(RE) Prerequisite(s): 201, 207, or 251.

477 Web Analytics (3) Use of web data for optimizing web usage and business performance.
(RE) Prerequisite(s): 320 with grade of $C$ or better.

REVISE TITLE
475 Applied Time Series and Forecasting (3)
Formerly: Time Series Analysis

## REVISE DESCRIPTION

*201 Introduction to Statistics (3) Data collection techniques. Graphical and numerical summaries of data. Introduction to probability and probability distributions. Binomial and normal distributions. Inference for a single mean, a single proportion, difference in means and difference in proportions using confidence intervals and hypothesis testing. Simple linear regression and correlation. Association between categorical variables. Use of statistical computing software. Applied course appropriate for a general audience.

Formerly: Data collection and descriptive statistics. Concepts of probability and probability distributions. Binomial and normal distributions. Estimation of means, confidence intervals, and hypothesis tests for single mean and proportion. Simple regression and correlation. Contingency tables. Process improvement and statistical process control. Use of statistical computing software. Applied course appropriate for a general audience.

## REVISE TITLE, REVISE DESCRIPTION

471 Business Analytics Capstone (3) Numeric and graphic description of data, probability and probability distributions, simulation, and sampling distributions. Estimation and hypothesis testing for one and two samples, parametric and nonparametric approaches, and bootstrapping. Tests for count data, simple and multiple linear regression, diagnostics and validation, and analysis of variance. Data Screening. Use of SAS and other statistical software.

Formerly: Statistical Methods (3) Numeric and graphic description of data, probability and probability distributions, simulation, and sampling distributions. Estimation and hypothesis testing for one and two samples, parametric and nonparametric approaches, and bootstrapping. Tests for count data, simple and multiple linear regression, diagnostics and validation, and analysis of variance. Use of SAS and other statistical software.

## REVISE TITLE, REVISE (RE) PREREQUISITE

## 320 Regression Modeling (3)

(RE) Prerequisite(s): 201, 207, or 251.
Formerly: Regression and Correlation Methods
(RE) Prerequisite(s): 201 or 251.

## 474 Data Mining and Business Analytics (3)

(RE) Prerequisite(s): 320 with grade of $C$ or better.
Formerly: Introduction to Data Mining (3)
(RE) Prerequisite: 471

## PART I. PROGRAM CHANGES

## REVISE COLLEGE TEXT (ADMISSION)

## Admission

Freshmen are admitted directly to the College of Business Administration in the first year. Selection Admission to the university is highly competitive and based primarily on academic achievement at the high school level and scores on the ACT and/or SAT. Students admitted into the College of Business Administration must maintain a minimum 2.50 cumulative grade point average and earn a grade of $C$ or better in the following progression courses or honors equivalents prior to the completion of 75 hours: MATH 123-MATH 125 or MATH 141-MATH 142 ( 6 or 8 hours); Oral Communication (3 hours from CMST 210 or CMST 240 ); Written Communication (3 hours from ENGL 255 or ENGL 295 ); ACCT 200 (3 hours); ECON 201 (4 hours); STAT 201 (3 hours); BUAD 201 (4 hours) MGT 201 (3 hours).

REVISE COLLEGE TEXT (INTRODUCTION, $4^{\text {TH }}$ PARAGRAPH)
The pre-business core courses (15 14 hours) are taken during the student's second year.

## REVISE COLLEGE TEXT (INTRODUCTION, $5^{\text {TH }}$ PARAGRAPH)

Building on the pre-business core foundation, the business core ( 2223 hours) consists of integrated contemporary business management modules in supply chain management, demand management, lean operations, information management, and integrated process management; discipline-specific courses in financial management and business strategy; and course work on global and legal issues. As business management perspectives change, the topics in the business core will, by design, adapt.

## REVISE COLLEGE TEXT (INTRODUCTION, $6^{\text {TH }}$ PARAGRAPH)

Simultaneously, students are completing the course work ( 24 hours) required by their chosen major. The College of Business Administration offers nine majors - accounting, business analytics, economics, finance, human resource management, logistics, management, marketing, and public administration, and statistics. Within the 24 hours of their major, students may study two areas of emphasis - their major with a collateral or their major with a dual concentration. With a collateral, students complete 15 hours in their major and 9 hours in their collateral area (with the exception of economics and statistics majors, who complete 18 hours in their major and 6 hours in their collateral area). With a dual concentration, students complete 12 hours in each area of emphasis. See the chart in this section for details of the collateral and dual concentration options for each major. A minimum grade of $C$ must be earned in every course counted toward the major, including major, collateral, or dual concentration courses.

REVISE COLLEGE TEXT (COLLATERAL AND DUAL CONCENTRATION CHART)


## REVISE BUSINESS ADMINISTRATION MINOR

## Required Courses

- ACCT 200 - Foundations of Accounting
- ECON 201 - Introductory Economics: A Survey Course
- STAT 201 - Introduction to Statistics
- BUAD-201-Business Functions
- MGT 201 - Introduction to Business Management
- FINC 300 - Fundamentals of Finance
- MARK 300 - Marketing and Supply Chain Management
- MGT 300-Organizational Management


## REVISE ALL COLLEGE MAJORS

- Increase course options for international business collaterals and dual concentrations.
- Reduce course options for philosophy/ethics requirement.
- Drop non-U.S. history requirement.
- Increase elective hours by 3 hours.
- Incorporate course changes:
o Add BUAD 242 (2 hours).
o Change BUAD 201 (4 hours) to MGT 201 (3 hours).
o Reduce BULW 301 from 3 hours to 2 hours.
o Revise English Composition footnote to reflect current policy


## DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT

REVISE ACCOUNTING MAJOR—COLLATERAL OPTION

| Second Year | Hours Credit |
| :---: | :---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Aon-US History | 3 |
| Electives | 63 |
| Third Year |  |
| BUAD 331, BUAD 332 | 4 |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 | 3 |
| ACCT 301 | 3 |
| INMT 341 | 3 |
| FINC 301 | 3 |
| BUAD 353 | 3 |
| BUAD 361 | 3 |
| ACCT 311 | 3 |
| ${ }^{45}$ Collateral | 3 |
| Fourth Year |  |
| BULW 301 | 23 |
| ACCT 321 | 3 |
| ACCT 411 | 3 |
| ACCT 414 or ACCT 431 | 3 |
| MGT 402 | 3 |
| ${ }^{45}$ Collateral | 6 |
| Electives | 4-8 |

## Accounting Collateral Options

- FINANCE - FINC 425, FINC 435, FINC 455.
- INFORMATION MANAGEMENT - INMT 342, INMT 442, INMT 443.
- INTERNATIONAL BUSINESS - Nine hours from Three courses from: IB 409, IB-419, IB 429, IB 439, IB 449, of IB 459, IB 492, BUAD 400 or MGT 472; and IB 489.
- LOGISTICS - LOG 310, LOG 411, LOG 421.
* University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from: AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
${ }^{45}$ In the spring of their Third Year, students normally make the decision whether to enter the job market upon graduation or apply to the Master of Accountancy program. ACCT 414 and ACCT 431 are both prerequisites to the MAcc program; therefore, students planning to enter the MAcc program should take ACCT 414 or ACCT 431 (whichever was not taken to satisfy the major requirement) instead of FINC 455 in the finance collateral, instead of INMT 442 in the information management collateral, instead of LOG 421 in the logistics collateral, and instead of one of the three required courses in the international business collateral.
Second Year Hours Credit
${ }^{4}$ ACCT 200 ..... 3
${ }^{4}$ Social Sciences: ECON 201* ..... 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL ..... 3
295*
295*
3
${ }^{4}$ STAT 201
34
MGT 201 BUAD 201
2
BUAD 242
BUAD 242 ..... 6
${ }^{5}$ Non-US History ..... 3
${ }^{56}$ Electives ..... 63Third Year
BUAD 331, BUAD 332 ..... 4
BUAD 341, BUAD 342 ..... 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 ..... 3
ACCT 301 ..... 3
${ }^{4}$ FINC 301 ..... 3
"BUAD 353 ..... 3
BUAD 361 ..... 3
INMT 341 ..... 3
ACCT 321 ..... 3
H-489 ..... $\theta$
Fourth Year
ACCT 311 ..... 3
BULW 301 ..... 23
International Business ..... 12
${ }^{4}$ MGT 402 ..... 3
${ }^{56}$ Electives ..... 7-11
* University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either Mathematics 125 or 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$ Students admitted to Global Leadership Scholars will complete the honors versions of these courses: ACCT 207, ECON 207, MGT 207 BUAD 207, STAT 207, FINC 307, BUAD 357, and MGT 407.
${ }^{5}$-One course from: AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
${ }^{56}$ Students admitted to Global Leadership Scholars will fulfill 10 hours of electives with the following courses - BUAD 217, BUAD 317, BUAD 417, BUAD 427 , and BUAD 497.
${ }^{67}$ Twelve hours from Any four courses chosen from: IB 409, IB-419, IB 429, IB 439, IB 449, or IB 459, IB 492, BUAD 400 or MGT 472; and IB 489.


## DEPARTMENT OF ECONOMICS

DROP:
ECONOMICS MAJOR—INDUSTRIAL ORGANIZATION AND FINANCE COLLATERAL ECONOMICS MAJOR-MONEY/MACROECONOMICS AND FINANCE COLLATERAL ECONOMICS MAJOR—QUANTITATIVE ECONOMICS AND STATISTICS COLLATERAL

REVISE ECONOMICS MAJOR—COLLATERAL OPTION

## Second Year

Hours Credit
ACCT 200
Social Sciences: ECON 201* ..... 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* ..... 3
STAT 201 ..... 3
MGT 201 BUAD 201 ..... 34
BUAD 242 ..... 2
${ }^{2}$ Arts and Humanities* ..... 6
${ }^{4}$ Aon-US History ..... 3
Electives ..... 63
Third Year
BUAD 331, BUAD 332 ..... 4
BUAD 341, BUAD 342 ..... 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 ..... 3
FINC 301 ..... 3
ECON 312 ..... 3
ECON 313 ..... 3
BUAD 353 ..... 3
BUAD 361 ..... 3
Collateral ..... 6
Fourth Year
BULW 301 ..... 23
Collateral ..... 6
Economics Electives (two additional economics courses at the 400 level) ..... 6
MGT 402 ..... 3
Electives ..... 7-11

## Economics Collateral Options

- BUSINESS ANALYTICS - STAT 320, STAT 474 (STAT 471 prerequisite); and six hours of upper-division economics electives.
- FINANCE - FINC 425 (ACCT 301 prerequisite); one of FINC 435, FINC 455 (ACCT 301 prerequisite); and six hours of upper-division economics electives.
- INDUSTRIAL ORGANIZATION AND FINANGE EGON 331, EGON 435; FING 425 (ACCT 301 prerequisite), FINC 455.
- MONEY/MACROECONOMICS AND FINANCE - ECON 351, ECON 413; FINC 425 (ACCT 301 prerequisite), FINC 435 (ACCT 301 prerequisite).
- QUANTITATIVE ECONOMICS AND MATH - ECON 381, ECON 482; MATH 241 (MATH 142 prerequisite), MATH 251.
- QUANTITATIVE ECONOMICS AND STATISTICS - ECON 381, ECON 482; STAT 320 , STAT 330 .
* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of $A$ or $B$ will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from: AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.


## REVISE ECONOMICS MAJOR—TRADITIONAL OPTION

| Second Year | Hours <br> Credit |
| :--- | ---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD-201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 2 |


| ${ }^{4}$ Non-US History | 3 |
| :--- | ---: |
| Electives | 63 |
| Third Year |  |
| BUAD 331, BUAD 332 | 4 |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL-443 | 4 |
| FINC 301 | 3 |
| ECON 312 | 3 |
| ECON 313 | 3 |
| BUAD 353 | 3 |
| BUAD 361 | 3 |
| Economics Major Coursework | 3 |
| Fourth Year | 3 |
| Economics Major Coursework |  |
| BULW 301 | 3 |
| Economics Electives (four additional economics courses, with at | 23 |
| least two at the 400 level) | 12 |
| MGT 402 | 3 |
| Electives | $7-11$ |

Economics Major Coursework Options (choose one area of focus): ENVIRONMENTAL ECONOMICS - ECON 362, ECON 463.
HEALTH ECONOMICS - ECON 436, PUBH 300.
INTERNATIONAL ECONOMICS - ECON 322, ECON 421.
INDUSTRIAL ORGANIZATION - ECON 331, ECON 435.
LABOR ECONOMICS - ECON 441; MGT 472.
MONEY/MACROECONOMICS - ECON 351, ECON 413.
PUBLIC ECONOMICS - ECON 371, ECON 472.
QUANTITATIVE ECONOMICS - ECON 381, ECON 482.
REGIONAL/URBAN ECONOMICS - ECON 361; FINC 485 (ACCT 301
prerequisite).

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$ One course from: AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.

REVISE ECONOMICS MAJOR—INTERNATIONAL BUSINESS DUAL CONCENTRATION

| Second Year | Hours Credit |
| :---: | :---: |
| ${ }^{4}$ ACCT 200 | 3 |
| ${ }^{4}$ Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| ${ }^{4}$ STAT 201 | 3 |
| ${ }^{4}$ MGT 201 BUAD-201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{5}$ Alon-US History | 3 |
| ${ }^{56}$ Electives | 63 |
| Third Year |  |
| BUAD 331, BUAD 332 | 4 |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 | 3 |
| ${ }^{4}$ FINC 301 | 3 |
| ECON 312 | 3 |
| ECON 313 | 3 |



## DEPARTMENT OF FINANCE

REVISE FINANCE MAJOR-COLLATERAL OPTION

| Second Year | Hours Credit |
| :--- | ---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Non-US History | 3 |
| Electives | 63 |

Third Year
BUAD 331, BUAD 332
BUAD 341, BUAD 342 4
Ethics: PHIL 244 or 252 PHHL 243, PHH 244, or PHHL 443
FINC 3013
ACCT 301 3
BUAD 353 3
BUAD 3613
FINC 425 3
Collateral 6
$\begin{array}{ll}\text { Fourth Year } \\ \text { BULW 301 } & 23\end{array}$
FINC 435 3
Collateral 3
FINC 455 3
Finance Elective: 3 hours from: FINC 402, FINC 475, FINC 485, 3

| FINC 493, FINC 495; or IB 449 | 3 |
| :--- | :--- |


| MGT 402 | 3 |
| :--- | ---: |
| Electives | $7-11$ |

## Finance Collateral Options

- ACCOUNTING - ACCT 321; and any one of ACCT 311, INMT 341, or ACCT 431 (increase Finance Electives by 3 hours).
- ECONOMICS - ECON 312, ECON 313; and either ECON 421 or ECON 482.
- ENTREPRENEURSHIP - MGT 331, MGT 350, MGT 451.
- INFORMATION MANAGEMENT - INMT 341, INMT 342, and either INMT 442 or INMT 443.
- INTERNATIONAL BUSINESS - Nine hours from Three courses from: IB 409, IB 419 , IB 429, IB 439, IB 449, IB 459, of IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.
- LOGISTICS - LOG 310, LOG 411, LOG 421.
* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.

REVISE FINANCE MAJOR-INTERNAL AUDITING DUAL CONCENTRATION

| Second Year | Hours Credit |
| :--- | ---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| 2Arts and Humanities* | 6 |
| ${ }^{4}$ Non-US History | 3 |
| Electives | 63 |

Electives 63
Third Year
BUAD 331, BUAD 332 4
BUAD 341, BUAD 342 4
Ethics: PHIL 244 or 252 PHIL 243, PHLL 244, or PHIL 443
FINC 301 3
ACCT 301 3
INMT 341 3
BUAD 353 3
BUAD 361 3
FINC 425 3
ACCT 3113
$\begin{array}{ll}\text { Fourth Year } \\ \text { BULW 301 } & 23\end{array}$
$\begin{array}{lr}\text { FINC } 435 & 23 \\ 3\end{array}$
FINC 455 3
ACCT 411 3
Finance Elective: 3 hours from: FINC 402, FINC 475, FINC 485, 3
$\begin{array}{ll}\text { FINC 493, FINC 495; or IB } 449 & 3 \\ \text { MGT 402 } & 3\end{array}$
$\begin{array}{lr}\text { MGT } 402 & 3 \\ { }_{4}^{5} \text { Electives } & 7-11\end{array}$
Communicating Through Writing

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course
appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST
248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST
201, MDST 202.
${ }^{45}$ Students are encouraged to take ACCT 321.

REVISE FINANCE MAJOR—INTERNATIONAL BUSINESS DUAL CONCENTRATION

| Second Year | Hours Credit |
| :---: | :---: |
| ${ }^{4}$ ACCT 200 | 3 |
| ${ }^{4}$ Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| ${ }^{4}$ STAT 201 | 3 |
| ${ }^{4}$ MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{5}$ Non-US History | 3 |
| ${ }^{56}$ Electives | 63 |
| Third Year |  |
| BUAD 331, BUAD 332 | 4 |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 | 3 |
| ${ }^{4}$ FINC 301 | 3 |
| ACCT 301 | 3 |
| ${ }^{4}$ BUAD 353 | 3 |
| BUAD 361 | 3 |
| FINC 425 | 3 |
| BULW 301 | 23 |
| IB 489 | $\theta$ |
| Fourth Year |  |
| FINC 435 | 3 |
| FINC 455 | 3 |
| ${ }^{67}$ International Business | 12 |
| ${ }^{4}$ MGT 402 | 3 |
| ${ }^{56}$ Electives | 7-11 |

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature-course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$ Students admitted to Global Leadership Scholars will complete the honors versions of these courses - ACCT 207, ECON 207, MGT 207 BUAD 207, STAT 207, FINC 307, BUAD 357, and MGT 407.
${ }^{5}$ One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
${ }^{56}$ Students admitted to Global Leadership Scholars will fulfill 10 hours of electives with the following courses - BUAD 217, BUAD 317, BUAD 417, BUAD 427, and BUAD 497.
${ }^{67}$ Twelve hours from Any four courses chosen from: IB 409, IB 419, IB 429, IB 439, IB 449, IB 459, of IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.

REVISE HUMAN RESOURCE MANAGEMENT MAJOR-COLLATERAL OPTION

| Second Year | Hours Credit |
| :--- | ---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Non-US History | 3 |
| Electives | 63 |
| Third Year |  |
| BUAD 331, BUAD 332 |  |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 244 or 252 PH1L 243, PHIL 244, or PH1L-443 | 4 |
| FINC 301 | 3 |
| MGT 331 | 3 |
| BUAD 353 | 3 |
| BUAD 361 | 3 |
| HRM 360 | 3 |
| Collateral | 3 |
| Fourth Year | 3 |
| BULW 301 | 3 |
| HRM 370 |  |
| Collateral | 3 |
| HRM 480 | 3 |
| HRM 485 | 3 |
| MGT 402 | 3 |
| Electives | 6 |

## Human Resource Management Collateral Options

- ENTREPRENEURSHIP - MGT 350, MGT 451, MGT 460.
- INFORMATION MANAGEMENT - INMT 341, INMT 342, and either INMT 442 or INMT 443.
- INTERNATIONAL BUSINESS - Nine hours from Three courses from: IB 409, IB 419, IB 429, IB 439, IB 449, IB 459, of IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.
- MARKETING - MARK 340, MARK 350, MARK 360.
* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the
English department, or ENGL 355. or a second-year literature course in the English
Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.

REVISE HUMAN RESOURCE MANAGEMENT MAJOR—INTERNATIONAL BUSINESS DUAL CONCENTRATION

| Second Year | Hours Credit |
| :--- | ---: |
| ${ }^{4}$ ACCT 200 | 3 |
| ${ }^{4}$ Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| ${ }^{4}$ STAT 201 | 3 |
| ${ }^{4}$ MGT 201 BUAD-201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{5}$ Alon-US History | 3 |
| ${ }^{56}$ Electives | 63 |

## Third Year

BUAD 331, BUAD 332 4
BUAD 341, BUAD 342 4
Ethics: PHIL 244 or 252 PHIL 243, PHH 244, or PHIL 443
${ }^{4}$ FINC 301 3
BULW $301 \quad 23$
${ }^{4}$ BUAD 353 3
BUAD 361 3
HRM 360 3
HRM 370 3
IB 489 O
Fourth Year
${ }^{\text {E® }}$ International Business 12
HRM 480 3
HRM 485 3
${ }^{4}$ MGT 402 3
${ }^{56}$ Electives 7-11

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$ Students admitted to Global Leadership Scholars will complete the honors versions of these courses - ACCT 207, ECON 207, MGT 207 BUAD 207, STAT 207, FINC 307, BUAD 357, and MGT 407.
${ }^{5}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, AMDST 202.
${ }^{56}$ Students admitted to Global Leadership Scholars will fulfill 10 hours of electives with the following courses - BUAD 217, BUAD 317, BUAD 417, BUAD 427, and BUAD 497.
${ }^{67}$ Twelve hours from Any four courses chosen from: IB 409, IB-419, IB 429, IB 439, IB 449, IB 459, or IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.


## $\diamond$ DROP MANAGEMENT MAJOR—OPERATIONS MANAGEMENT COLLATERAL

## Management Collateral Options

- ENTREPRENEURSHIP - MGT 350, MGT 451, MGT 460.
- INFORMATION MANAGEMENT - INMT 341, INMT 342; and either INMT 442 or INMT 443.
- INTERNATIONAL BUSINESS - Three courses from: IB 409, IB-419, IB 429, IB 439, IB 449, IB 459, or IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.
- MARKETING - MARK 340, MARK 350, MARK 360.
- OPERATIONS MANAGEMENT - OMS 341, OMS 441, and either OMS 410 or OMS 421.
- RESOURCE MANAGEMENT - ACCT 301, ACCT 321; FINC 425.

REVISE MANAGEMENT MAJOR—COLLATERAL OPTION

| Second Year | Hours Credit |
| :--- | ---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Non-US History | 3 |

Electives ..... 63
Third Year
BUAD 331-BUAD 332 ..... 4
BUAD 341-BUAD 342 ..... 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 ..... 3
FINC 301 ..... 3
MGT 331 ..... 3
BUAD 353 ..... 3
BUAD 361 ..... 3
MGT 336 ..... 3
Collateral ..... 3
Fourth Year
BULW 301 ..... 23
HRM 360 ..... 3
Collateral ..... 6
MGT 430 ..... 3
MGT 435 ..... 3
MGT 402 ..... 3
Electives ..... 7-11

## Management Collateral Options

- ENTREPRENEURSHIP - MGT 350, MGT 451, MGT 460.
- INFORMATION MANAGEMENT - INMT 341, INMT 342; and either INMT 442 or INMT 443.
- INTERNATIONAL BUSINESS - Nine hours from Three courses from: IB 409, IB-419, IB 429, IB 439, IB 449, IB 459, of IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.
- MARKETING - MARK 340, MARK 350, MARK 360.
- OPERATIONS MANAGEMENT - OMS 341, OMS 441, and either OMS 410 or OMS 421.
- RESOURCE MANAGEMENT - ACCT 301, ACCT 321; FINC 425.

[^2]REVISE MANAGEMENT MAJOR-INTERNATIONAL BUSINESS DUAL CONCENTRATION

## Second Year

Hours Credit
${ }^{4}$ ACCT 200
3
Social Sciences: ECON 201* 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* 3
${ }^{4}$ STAT 201 3
${ }^{4}$ MGT 201 BUAD 201 ( 34
BUAD 242
34
${ }^{2}$ Arts and Humanities* 6
${ }^{5}$ Non-US History 3
${ }^{56}$ Electives 63
Third Year
BUAD 331-BUAD 332 4
BUAD 341-BUAD 342 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443
${ }^{4}$ FINC 301 3
MGT 331 3
${ }^{4}$ BUAD 353 3
BUAD 361 3
MGT 336 3
HRM 360 3
H-489 - -
Fourth Year
$\begin{array}{ll}\text { BULW 301 } & 23\end{array}$
${ }^{\text {b7 }}$ International Business 12
MGT 430 or MGT 435 3
${ }^{4}$ MGT 402 3
${ }^{56}$ Electives $\quad$ 7-11

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$ Students admitted to the Global Leadership Scholars Program will complete the honors versions of these courses: ACCT 207, ECON 207, MGT 207 BUAD 207, STAT 207, FINC 307, BUAD 357, and MGT 407.
${ }^{5}$-One course from: AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
${ }^{56}$ Students admitted to the Global Leadership Scholars Program will fulfill 10 hours of electives with the following courses: BUAD 217, BUAD 317, BUAD 417, BUAD 427, and BUAD 497.
${ }^{67}$ Twelve hours from Any four courses chosen from: IB 409, IB-419, IB 429, IB 439, IB 449, IB 459, өf IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.


## DEPARTMENT OF MARKETING AND LOGISTICS

DROP LOGISTICS MAJOR—OPERATIONS MANAGEMENT COLLATERAL

## Logistics Collateral Options

ENTREPRENEURSHIP - MGT 331, MGT 350, MGT 451.
INFORMATION MANAGEMENT - INMT 341, INMT 342, and either INMT 442 or INMT 443.
INTERNATIONAL BUSINESS - Three courses from: IB 409, IB 429, IB 439, IB 449, IB 459, IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.
MARKETING - MARK 340, MARK 350, MARK 360.
OPERATIONS MANAGEMENT - OMS 341, OMS 441, and either OMS 410 or OMS 421.

REVISE LOGISTICS MAJOR—COLLATERAL OPTION

| Second Year | Hours Credit |
| :--- | ---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| ${ }^{\text {2 }}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Aon-US History | 3 |
| Electives | 63 |

## Third Year

BUAD 331, BUAD 332 4
BUAD 341, BUAD 342 4
Ethics: PHIL 244 or 252 PHH 243, PHHL 244, or PHIL 443
FINC 3013
BUAD 353 ..... 3
BUAD 361 ..... 3
LOG 310 ..... 3
Collateral ..... 3
BULW 301 ..... 23
Logistics Collateral Options
ENTREPRENEURSHIP - MGT 331, MGT 350, MGT 451.INFORMATION MANAGEMENT - INMT 341, INMT 342, and either INMT 442 orINMT 443.INTERNATIONAL BUSINESS - Nine hours from Three courses from: IB 409, IB 419,IB 429, IB 439, IB 449, IB 459, of IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.MARKETING - MARK 340, MARK 350, MARK 360.
OPERATIONS MANAGEMENT - OMS 341, OMS 441, and either OMS 410 or OMS
421.

* Meets University General Education Requirement.${ }^{1}$ Must be completed by the end of the First Year.${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first yearcomposition requirement by choosing ENGL 102, a sophomore-level course in the
English department, or ENGL 355. of a second-year literature course in the EnglishDepartment. If the sophomore-level English second-year literature course appears onthe list for the Arts and Humanities list, the course may also be counted toward theArts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during thesecond semester of the Second Year. As a result, either MATH 125 or MATH 141must be completed by the end of the first semester of the Second Year.${ }^{4}$-One course from: AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248,HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST

202. 

REVISE LOGISTICS MAJOR—INFORMATION MANAGEMENT DUAL CONCENTRATION
Second Year ..... Hours CreditACCT 2003
Social Sciences: ECON 201* ..... 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* ..... 3
STAT 201 ..... 3
MGT 201 BUAD 201 ..... 34
BUAD 242 ..... 2
${ }^{2}$ Arts and Humanities*6
${ }^{4}$ Aon-US History ..... 63
Third Year
BUAD 331, BUAD 332 ..... 4
BUAD 341, BUAD 342 ..... 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 ..... 3
FINC 301 ..... 3
INMT 341 ..... 3
BUAD 353 ..... 3
BUAD 361 ..... 3
LOG 310 ..... 3
INMT 342 ..... 3
Fourth Year
LOG 411 ..... 3
LOG 413 or LOG 421 ..... 3
BULW 301 ..... 23
INMT 442 ..... 3
INMT 443 ..... 3
LOG 460 ..... 3
MGT 402 ..... 3
Electives ..... 7-11

[^3]composition requirement by choosing ENGL 102, a sophomore-level course in the
English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.

REVISE LOGISTICS MAJOR—INTERNAL AUDITING DUAL CONCENTRATION

| Second Year | Hours Credit |
| :--- | ---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD-201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Aon-US History | 3 |
| Electives | 63 |

## Third Year

BUAD 331, BUAD 3324
BUAD 341, BUAD 342 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443
ACCT 3013
INMT 341 3
FINC 301 3
BUAD 353 3
BUAD 3613
LOG 310 3
ACCT 3113
$\begin{array}{ll}\text { Fourth Year } & 23\end{array}$
LOG 411 3
LOG 413 or LOG 4213
ACCT 411 3
LOG 460 3
MGT 402 35
${ }^{45}$ Electives $\quad$ 7-11

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the
English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$ One course from: AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
${ }^{45}$ Students are encouraged to take ACCT 321.

REVISE LOGISTICS MAJOR—INTERNATIONAL BUSINESS DUAL CONCENTRATION

| ${ }^{4}$ STAT 201 | 3 |
| :---: | :---: |
| ${ }^{4}$ MGT 201 BUAD-201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{5}$ Non-US History | 3 |
| ${ }^{56}$ Electives | 63 |
| Third Year |  |
| BUAD 331, BUAD 332 | 4 |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 | 3 |
| ${ }^{4}$ FINC 301 | 3 |
| ${ }^{4}$ BUAD 353 | 3 |
| BUAD 361 | 3 |
| LOG 310 | 3 |
| ${ }^{56}$ Electives | 3 |
| BULW 301 | 23 |
| IB-489 | $\theta$ |
| Fourth Year |  |
| LOG 411 | 3 |
| LOG 413 or LOG 421 | 3 |
| ${ }^{67}$ International Business | 12 |
| LOG 460 | 3 |
| ${ }^{4}$ MGT 402 | 3 |
| ${ }^{56}$ Electives | 4-8 |

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of $A$ or $B$ will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the
English department, or ENGL 355. or a second-year literature-course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for Statistics 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$ Students admitted to Global Leadership Scholars will complete the honors versions of these courses - ACCT 207, ECON 207, MGT 207 BUAD 207, STAT 207, FINC 307, BUAD 357, and MGT 407.
${ }^{5}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
${ }^{56}$ Students admitted to Global Leadership Scholars will fulfill 10 hours of electives with the following courses - BUAD 217, BUAD 317, BUAD 417, BUAD 427, and BUAD 497. ${ }^{67}$ Twelve hours from Any four courses chosen from: IB 409, IB 419, IB 429, IB 439, IB 449, IB 459, or IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.


## REVISE LOGISTICS MAJOR—MARKETING DUAL CONCENTRATION

Second YearHours CreditACCT 2003Social Sciences: ECON 201* ..... 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* ..... 3
STAT 201 ..... 3
MGT 201 BUAD 201 ..... 34
BUAD 242!
${ }^{2}$ Arts and Humanities*
3
${ }^{4}$ Non-US History
63
Electives
Third Year
BUAD 331, BUAD 332 ..... 4
BUAD 341, BUAD 342 ..... 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 ..... 3
FINC 301 ..... 3
BUAD 353 ..... 3
BUAD 361 ..... 3
LOG 310 ..... 3
MARK 340 ..... 3
MARK 350 ..... 3
Fourth Year
LOG 411 ..... 3
LOG 413 or LOG 421 ..... 3
BULW 301 ..... 23
LOG 4603
MARK 360 ..... 3
MARK 460 ..... 3
MGT 402 ..... 3
Electives ..... 7-11

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the
English department, or ENGL 355. or a second-year literature-course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.


## drop Logistics major-operations management dual concentration

## $\diamond$ DROP LOGISTICS MAJOR-STATISTICS DUAL CONCENTRATION

## $\diamond$ ADD LOGISTICS MAJOR—BUSINESS ANALYTICS DUAL CONCENTRATION

## First Year

${ }^{1,2}$ ² Written Communication: ENGL 101*, ENGL 102*
${ }^{3}$ Quantitative Reasoning: MATH 123*, MATH 125* or MATH 141*, MATH 142* ..... 6 or 8
Cultures and Civilizations: Intermediate Foreign Language* ..... 6Natural Sciences*
Social Sciences* ..... 3
Oral Communication: CMST 210*, CMST 217*, CMST 240*, or CMST 247* ..... 3
Second YearACCT 2003
Social Sciences: ECON 201* ..... 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* ..... 3
STAT 201 ..... 3
MGT 201 ..... 3
BUAD 242 ..... 2
${ }^{2}$ Arts and Humanities* ..... 6
Electives ..... 6
Third Year
BUAD 331, BUAD 332 ..... 4
BUAD 341, BUAD 342 ..... 4
Ethics: PHIL 244 or 252 ..... 3
FINC 301 ..... 3
BUAD 353 ..... 3
BUAD 361 ..... 3
LOG 310 ..... 3
STAT 320 ..... 3
BULW 301 ..... 2
Fourth Year
LOG 4113
LOG 413 or LOG 421 ..... 3
STAT 340 or OMS 331 ..... 3
STAT 471 ..... 3
STAT 474 ..... 3
LOG 460 ..... 3
MGT 402 ..... 3
Electives ..... 7-11

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of $A$ or $B$ will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. If the sophomore-level English course appears on the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement. ${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
REVISE MARKETING MAJOR—COLLATERAL OPTION
Second Year
ACCT 200 Hours Credit
ACCT 200
Social Sciences: ECON 201* 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* 3
STAT 201
3
MGT 201 BUAD 201 34
BUAD 242
${ }^{2}$ Arts and Humanities* 6
${ }^{4}$ Non-US History 3
Electives 63
Third Year
BUAD 331, BUAD 332 4
BUAD 341, BUAD 342 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443
FINC 3013
BUAD 353 3
BUAD 361 3
MARK 340 3
MARK 350 3
Collateral 3

| Fourth Year |
| :--- |
| BULW 301 |

MARK 360
Marketing Electives: MARK 462, MARK 466, or MARK 468 3
Collateral 6
MGT 402 3
MARK 460 3
Electives 7-11

## Marketing Collateral Options

- ENTREPRENEURSHIP - MGT 331, MGT 350, MGT 451.
- INFORMATION MANAGEMENT - INMT 341, INMT 342, and either INMT 442 or INMT 443.
- INTERNATIONAL BUSINESS - Nine hours from Three courses from: IB 409, IB 419, IB 429, IB 439, IB 449, IB 459, өf IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.
- LOGISTICS - LOG 310, LOG 411, LOG 421.
- RESOURCE MANAGEMENT - ACCT 301; FINC 425, FINC 455.

[^4]requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.

REVISE MARKETING MAJOR—INFORMATION MANAGEMENT DUAL CONCENTRATION

| Second Year | Hours Credit |
| :---: | :---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Non-US History | 3 |
| Electives | 63 |
| Third Year |  |
| BUAD 331, BUAD 332 | 4 |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 | 3 |
| FINC 301 | 3 |
| BUAD 353 | 3 |
| BUAD 361 | 3 |
| MARK 340 | 3 |
| MARK 350 | 3 |
| INMT 341 | 3 |
| Fourth Year |  |
| BULW 301 | 23 |
| MARK 360 | 3 |
| INMT 342 | 3 |
| INMT 442 | 3 |
| INMT 443 | 3 |
| MGT 402 | 3 |
| MARK 460 | 3 |
| Electives | 7-11 |
| * Meets University General Education Requirement. |  |
| ${ }^{1}$ Must be completed by the end of the First Year. |  |
| ${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year |  |
| composition requirement by choosing ENGL 102, a sophomore-level course in the English |  |
| the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities ${ }_{3}$ requirement. |  |
| semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year. |  |
| ${ }^{4}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST |  |

REVISE MARKETING MAJOR—INTERNAL AUDITING DUAL CONCENTRATION

| Second Year | Hours Credit |
| :--- | ---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Non-US History | 3 |
| Electives | 63 |

Third Year
BUAD 331, BUAD 332 ..... 4
BUAD 341, BUAD 342 ..... 4
Ethics: PHIL 244 or 252 PHIL 243, PHHL 244, or PHHL 443 ..... 3
ACCT 301 ..... 3
FINC 301 ..... 3
INMT 341 ..... 3
BUAD 353 ..... 3
BUAD 361 ..... 3
MARK 340 ..... 3
MARK 350 ..... 3
Fourth Year
MARK 360 ..... 3
ACCT 411 ..... 3
ACCT 311 ..... 3
BULW 301 ..... 23
MGT 4023
MARK 460
3
3
${ }^{45}$ Electives ..... 7-11

* Meets University General Education Requirement .${ }^{1}$ Must be completed by the end of the First Year.${ }^{2}$ Students who complete ENGL 118 with a grade of $A$ or $B$ will complete their first yearcomposition requirement by choosing ENGL 102, a sophomore-level course in the Englishdepartment, or ENGL 355. or a second-year literature course in the English Department. Ifthe sophomore-level English second-year literature course appears on the list for the Artsand Humanities list, the course may also be counted toward the Arts and Humanitiesrequirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST
255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
${ }^{45}$ Students are encouraged to take ACCT 321.
REVISE MARKETING MAJOR—INTERNATIONAL BUSINESS DUAL CONCENTRATION
Second YearHours Credit
${ }^{4}$ ACCT 2003
${ }^{4}$ Social Sciences: ECON 201* ..... 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* ..... 3
${ }^{4}$ STAT 201 ..... 3
MGGT 201 BUAD 201 ..... 34
BUAD 242-
${ }^{2}$ Arts and Humanities* ..... 6
${ }^{5}$ Non-US History
63
${ }^{56}$ Electives
Third Year
BUAD 331, BUAD 332 ..... 4
BUAD 341, BUAD 342 ..... 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 ..... 3
${ }^{4}$ FINC 301 ..... 3
${ }^{4}$ BUAD 353 ..... 3
BUAD 361 ..... 3
MARK 340 ..... 3
BULW 301 ..... 23
MARK 350 ..... 3
IB 489 ..... 0
Fourth Year
MARK 360 ..... 3
${ }^{67}$ International Business ..... 12
"MGT 402 ..... 3
MARK 460 ..... 3
${ }^{56}$ Electives ..... 7-11

[^5]REVISE MARKETING MAJOR—LOGISTICS DUAL CONCENTRATION

| Second Year | Hours Credit |
| :--- | ---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Non-US History | 6 |
| Electives | 63 |

Third Year
BUAD 331, BUAD 332 4
BUAD 341, BUAD 342 4
Ethics: PHIL 244 or 252 PHIL 243, PHHL 244, or PHIL 443
FINC 3013
BUAD 353 3
BUAD 361 3
MARK 340 3
MARK 350 3
LOG 310 3

| Fourth Year |
| :--- |
| BULW 301 |
| 23 |

MARK 360 3
LOG 4113
LOG 413 or LOG 4213
MGT 402 3
MARK 460 3
LOG 460 3
Electives 7-11

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of $A$ or $B$ will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$ One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST

ADD MARKETING MAJOR-BUSINESS ANALYTICS DUAL CONCENTRATION

| First Year | Hours Credit |
| :---: | :---: |
| ${ }^{1,2}$ Written Communication: ENGL 101*, ENGL 102* | 6 |
| ${ }^{3}$ Quantitative Reasoning: MATH 123*, MATH 125* or MATH 141*, MATH 142* | 6 or 8 |
| Cultures and Civilizations: Intermediate Foreign Language* | 6 |
| Natural Sciences* | 6 or 8 |
| Social Sciences* | 3 |
| Oral Communication: CMST 210*, CMST 217*, CMST 240*, or CMST 247* | 3 |
| Second Year |  |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 | 3 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| Electives | 6 |
| Third Year |  |
| BUAD 331, BUAD 332 | 4 |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 252 or 244 | 3 |
| FINC 301 | 3 |
| BUAD 353 | 3 |
| BUAD 361 | 3 |
| MARK 340 | 3 |
| MARK 350 | 3 |
| STAT 320 | 3 |
| Fourth Year |  |
| BULW 301 | 2 |
| MARK 360 | 3 |
| STAT 471, STAT 474 | 6 |
| STAT 340 or STAT 475 or OMS 331 | 3 |
| MGT 402 | 3 |
| MARK 460 | 3 |
| Electives | 7-11 |

Total 120

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of $A$ or $B$ will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. If the sophomore-level English course appears on the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.


## DEPARTMENT OF STATISTICS, OPERATIONS AND MANAGEMENT SCIENCE

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    DROP:
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        STATISTICS MAJOR—ECONOMICS COLLATERAL (NOT BEING RENAMED OR REPLACED)
        STATISTICS MAJOR—FINANCE COLLATERAL
        STATISTICS MAJOR—INFORMATION MANAGEMENT COLLATERAL
        STATISTICS MAJOR—LOGISTICS COLLATERAL
        STATISTICS MAJOR-MARKETING COLLATERAL
        STATISTICS MAJOR—OPERATIONS MANAGEMENT COLLATERAL (NOT BEING RENAMED OR REPLACED)
        STATISTICS MAJOR—FIFTH YEAR MASTER OF SCIENCE—COLLATERAL OPTION
    STATISTICS MAJOR-INTERNAL AUDITING DUAL CONCENTRATION (NOT BEING RENAMED OR REPLACED) STATISTICS MAJOR-INTERNATIONAL BUSINESS DUAL CONCENTRATION
STATISTICS MAJOR-LOGISTICS DUAL CONCENTRATION
STATISTICS MAJOR-MARKETING DUAL CONCENTRATION
ADD:
BUSINESS ANALYTICS MAJOR-FINANCE COLLATERAL
BUSINESS ANALYTICS MAJOR-INFORMATION MANAGEMENT COLLATERAL
BUSINESS ANALYTICS MAJOR-LOGISTICS COLLATERAL
BUSINESS ANALYTICS MAJOR-MARKETING COLLATERAL
BUSINESS ANALYTICS MAJOR-FIFTH YEAR MASTER OF SCIENCE-COLLATERAL OPTION
BUSINESS ANALYTICS MAJOR-INFORMATION MANAGEMENT DUAL CONCENTRATION (BRAND NEW)
BUSINESS ANALYTICS MAJOR-INTERNATIONAL BUSINESS DUAL CONCENTRATION
BUSINESS ANALYTICS MAJOR-LOGISTICS DUAL CONCENTRATION
BUSINESS ANALYTICS MAJOR-MARKETING DUAL CONCENTRATION

REVISE BUSINESS ANALYTICS MAJOR-COLLATERAL OPTION

| Second Year | Hours Credit |
| :---: | :---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD 201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Non-US History | 3 |
| Electives | 63 |
| Third Year |  |
| BUAD 331, BUAD 332 | 4 |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 244 or 252 PHHL 243, PHHL 244, or PHIL 443 | 3 |
| FINC 301 | 3 |
| STAT 365 | 3 |
| ${ }^{4}$ Business Analytics Elective | 3 |
| BUAD 353 | 3 |
| BUAD 361 | 3 |
| STAT 320, STAT 471 | 63 |
| STAT 330 | 3 |
| Fourth Year |  |
| BULW 301 | 23 |
| STAT 471474 | 3 |
| STAT 475 or STAT 477 | 3 |
| ${ }^{4}$ Business Analytics Elective | 3 |
| Statistics Electives: any -400-level courses from Statistics or MATH 423 and MATH 425 | 6 |
| Collateral | 3 |
| MGT 402 | 3 |
| Electives | 7-11 |

## Business Analytics Statistics Collateral Options

- ECONOMICS - ECON 312 or ECON 313, ECON 381.
- FINANCE - FINC 425 (ACCT 301 prerequisite); and one of FINC 435 (ACCT 301 prerequisite), FINC 455, FINC 475 (ACCT 301 prerequisite), FINC 485 (ACCT 301 prerequisite).
- INFORMATION MANAGEMENT - INMT 341, INMT 342 (INMT 341 prerequisite); and one of INMT 442, INMT 443 (INMT 341 prerequisite).
- LOGISTICS - LOG 310, LOG 411.
- MARKETING - MARK 340, MARK 350.
- OPERATIONS MANAGEMENT - OMS 341 and either OMS 421 or OMS 441.

[^6]sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST
255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
${ }^{4}$ Choose two of the following courses: INMT 341; OMS 331; STAT 340.

## REVISE BUSINESS ANALYTICS MAJOR—FIFTH YEAR MASTER OF SCIENCE

| Second Year | Hours Credit |
| :---: | :---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| STAT 320 and STAT 330 | 6 |
| MATH 241 and MATH 251 | 7 |
| Oral Communication: CMST 210*, CMST 217*, CMST 240*, or CMST 247* | 3 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| MGT 201 BUAD-201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 3 |
| Third Year |  |
| BUAD 331, BUAD 332 | 4 |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 | 3 |
| STAT 365, STAT 471, STAT 474, and STAT 475 | 12 |
| BUAD 353 and BUAD 361 | 6 |
| FINC 301 | 3 |
| Fourth Year |  |
| Statistics 566, 572, and 573 (for graduate credit) | 9 |
| Collateral | 6 |
| BULW 301 | 23 |
| MGT 402 | 3 |
| ${ }^{2}$ Arts and Humanities* | 3 |
| ${ }^{4}$ Non-US History | 3 |
| Elective | 3 |
| Social Sciences* | 3 |

Business Analytics Statistics Collateral Options

- ECONOMICS - ECON 312 or ECON 313, ECON 381.
- FINANCE - FINC 425 (ACCT 301 prerequisite); and one of FINC 435 (ACCT 301 prerequisite), FINC 455, FINC 475 (ACCT 301 prerequisite), FINC 485 (ACCT 301 prerequisite).
- INFORMATION MANAGEMENT - INMT 341, INMT 342 (INMT 341 prerequisite); and one of INMT 442, INMT 443 (INMT 341 prerequisite).
- LOGISTICS - LOG 310, LOG 411.
- MARKETING - MARK 340, MARK 350.
- OPERATIONS MANAGEMENT - OMS 341 and either OMS 421 or OMS 441.


## 5th Year

First summer - Internship; Comprehensive exam over Statistics 572, 573.
Fall - Statistics 561 (1), 563 (3), 579 (3), 587 (1), 592 (1), and Elective (3).
Spring - Statistics 564 (3), 578 (3), and Elective (3).
Second summer - Statistics 593 (3); Comprehensive exam over Statistics 563, 564.

[^7]
## First Year.

${ }^{4}$ One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST
255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
$\diamond$ ADD BUSINESS ANALYTICS MAJOR—INFORMATION MANAGEMENT DUAL CONCENTRATION

First Year
${ }^{1,2}$ Written Communication: ENGL 101*, ENGL 102*
Hours Credit
6
${ }^{3}$ Quantitative Reasoning: MATH 123*, MATH 125* or MATH 141*, MATH 142*
Cultures and Civilizations: Intermediate Foreign Language*
Natural Sciences*
6

Social Sciences* 6 or 8

Oral Communication: CMST 210*, CMST 217*, CMST 240*, or CMST 247*

## Second Year

ACCT 2003
Social Sciences: ECON 201* ..... 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* ..... 3
STAT 201 ..... 3
MGT 201 ..... 3
BUAD 242 ..... 2
${ }^{2}$ Arts and Humanities* ..... 6
Electives ..... 6
Third Year
BUAD 331, BUAD 332 ..... 4
BUAD 341, BUAD 342 ..... 4
Ethics: PHIL 244 or 252 ..... 3
FINC 301 ..... 3
STAT 320, 471 ..... 3
${ }^{6}$ BUAD 353 ..... 3
BUAD 361
3
LOG 310
Fourth Year
BULW 301 ..... 2
STAT 474 ..... 3
${ }^{4}$ Business Analytics Elective ..... 3
LOG 411 ..... 3
LOG 421 or LOG 413 ..... 3
LOG 460 ..... 3
MGT 402 ..... 7-11

Total Hours 120

[^8]${ }^{4}$ ACCT 200 ..... 3
${ }^{4}$ Social Sciences: ECON 201* ..... 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* ..... 3
${ }^{4}$ STAT 201
34
${ }^{4}$ MGT 201 BUAD-201 ..... 34
BUAD 242
6
${ }^{2}$ Arts and Humanities*
3
${ }^{5}$ Non-US History
63
${ }^{56}$ ElectivesThird Year
BUAD 331, BUAD 332 ..... 4
BUAD 341, BUAD 342 ..... 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 ..... 3
${ }^{4}$ FINC 301 ..... 3
${ }^{4}$ BUAD 353 ..... 3
BUAD 361 ..... 3
STAT 320 ..... 3
STAT 365 STAT 340 or OMS 331 ..... 3
BULW 301 ..... 23
H-489 ..... $\theta$
Fourth Year
STAT 471, STAT 474 ..... 63
STAT 330 or STAT 474 or STAT 475 ..... 3
${ }^{67}$ International Business ..... 12
${ }^{4}$ MGT 402 ..... 3
${ }^{56}$ Electives ..... 7-11

* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$ Students admitted to Global Leadership Scholars will complete the honors versions of these courses - ACCT 207, ECON 207, MGT 207 BUAD 207, STAT 207, FINC 307, BUAD 357, and MGT 407.
${ }^{5}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
${ }^{56}$ Students admitted to Global Leadership Scholars will fulfill 10 hours of electives with the following courses - BUAD 217, BUAD 317, BUAD 417, BUAD 427, and BUAD 497.
${ }^{67}$ Twelve hours from Any four courses chosen from: IB 409, IB 419, IB 429, IB 439, IB 449, IB 459, of IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.
REVISE BUSINESS ANALYTICS MAJOR—LOGISTICS DUAL CONCENTRATION
Second Year ..... Hours CreditACCT 2003
Social Sciences: ECON 201* ..... 4
Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* ..... 3
STAT 201 ..... 3
MGT 201 BUAD 201 ..... 34
BUAD 242 ..... 2
${ }^{2}$ Arts and Humanities* ..... 6
${ }^{4}$ ANon-US History ..... 3
Electives ..... 63
Third Year
BUAD 331, BUAD 332 ..... 4
BUAD 341, BUAD 342 ..... 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 ..... 3
FINC 301 ..... 3
STAT 365 STAT 340 or OMS 331 ..... 3
BUAD 353 ..... 3
BUAD 361 ..... 3
LOG 310 ..... 3
STAT 320 ..... 3
Fourth Year
BULW 301 ..... 23
STAT 471, 474 ..... 63
STAT 474 or STAT 475 ..... 3
LOG 411 ..... 3
LOG 421 or LOG 413 ..... 3
LOG 460 ..... 3
MGT 402 ..... 3
Electives ..... 7-11
* Meets University General Education Requirement.
${ }^{1}$ Must be completed by the end of the First Year.
${ }^{2}$ Students who complete ENGL 118 with a grade of $A$ or $B$ will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature-course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.
REVISE BUSINESS ANALYTICS MAJOR—MARKETING DUAL CONCENTRATION

| Second Year | Hours Credit |
| :---: | :---: |
| ACCT 200 | 3 |
| Social Sciences: ECON 201* | 4 |
| Written Communication: ENGL 255*, ENGL 257*, or ENGL 295* | 3 |
| STAT 201 | 3 |
| MGT 201 BUAD-201 | 34 |
| BUAD 242 | 2 |
| ${ }^{2}$ Arts and Humanities* | 6 |
| ${ }^{4}$ Aon-US History | 3 |
| Electives | 63 |
| Third Year |  |
| BUAD 331, BUAD 332 | 4 |
| BUAD 341, BUAD 342 | 4 |
| Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 | 3 |
| FINC 301 | 3 |
| BUAD 353 | 3 |
| BUAD 361 | 3 |
| MARK 340 | 3 |
| MARK 350 | 3 |
| STAT 320 Statistics Dual Concentration | 3 |
| Fourth Year |  |
| BULW 301 | 23 |
| MARK 360 | 3 |
| STAT 471, 474 Statistics Dual Concentration | 69 |
| STAT 340 or STAT 475 or OMS 331 | 3 |
| MGT 402 | 3 |
| MARK 460 | 3 |
| Electives | 7-11 |

ACCT 200
Social Sciences: ECON 201* ..... 4
STAT 201 ..... 3
BUAD 2422
${ }^{2}$ Arts and Humanities* ..... 6
Electives ..... 63
BUAD 331, BUAD 332 ..... 4
Ethics: PHIL 244 or 252 PHIL 243, PHIL 244, or PHIL 443 ..... 3BUAD 3533
BUAD 361 ..... 3MARK 3503
STAT 320 Statistics Dual concentration23
3BULW 301
STAT 471, 474 Statistics Dual Concentration ..... 69
MGT 402 ..... 3
Electives ..... 7-11

## Statistics and Marketing Dual Concentration Options

OPTION 1 - STAT 320, STAT 330, STAT 471, and either STAT 474 or STAT 475.
OPTION 2 - STAT 320, STAT 471, STAT 474, STAT 475.

[^9]composition requirement by choosing ENGL 102, a sophomore-level course in the English
department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
${ }^{4}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST
255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.

# COLLEGE OF COMMUNICATION AND INFORMATION 

## All changes effective Fall 2011

## PART I. COURSE CHANGES

## SCHOOL OF ADVERTISING AND PUBLIC RELATIONS <br> (841) (PBRL) Public Relations

REVISE (RE) PREREQUISITE
320 Public Relations Communication (3)
(RE) Prerequisite(s): 270 and Advertising 310 or Public Relations 310 and Journalism and Electronic Media 200.
Formerly: (RE) Prerequisite(s): 270 and Advertising 310.
370 Public Relations Cases (3)
(RE) Prerequisite(s): Advertising 340 or Public Relations 340.
Formerly: (RE) Prerequisite(s): Advertising 340 and Public Relations 320.
380 Public Relations Professional Seminar (1)
(RE) Prerequisite(s): Advertising 310 or Public Relations 310.
Formerly: (RE) Prerequisite(s): Advertising 310 and 340.
470 Public Relations Campaigns (3)
(RE) Prerequisite(s): 320 and 370 and Advertising 250.
Formerly: (RE) Prerequisite(s): 370 and Advertising 250.

## PART II. PROGRAM CHANGES

REVISE COLLEGE TEXT (MINORS)

## Minors

Disciplinary minors are offered in communication studies, information studies and technology, and journalism and electronic media. Students interested in a disciplinary minor should contact the director of the appropriate school. At least six of the credit hours
required for a minor must be completed at the University of Tennessee, Knoxville.
An interdisciplinary minor in communication and information is available to students majoring in communication studies and students in majors outside the College of Communication and Information. Students interested in an interdisciplinary minor should contact the Director of Advising.

At least six of the credit hours required for a minor must be completed at the University of Tennessee, Knoxville.

DROP COMMUNICATION AND INFORMATION MINOR

## SCHOOL OF ADVERTISING AND PUBLIC RELATIONS

REVISE ADVERTISING MAJOR

| Third Year | Hours Credit |
| :--- | ---: |
| MGT BUAD 201 | 34 |
| PSYC 110* | 3 |
| ADVT 340 | 3 |
| ADVT 350 | 3 |
| ADVT 360 | 3 |
| ADVT 380 | 1 |
| CMST 240* | 3 |
| MARK 300 | 3 |
| MGT 300 | 3 |
| ${ }^{5}$ Arts and Sciences Electives | 3 |
| Fourth Year | 6 |


| PSYC 360 | 3 |
| :--- | ---: |
| ADVT 450 | 3 |
| ADVT 470 | 3 |
| ADVT 480 | 3 |
| ${ }^{6}$ College Elective | 3 |
| ${ }^{5}$ Arts and Sciences Electives | 6 |
| ${ }^{7}$ General Electives | $4-53-4$ |
|  |  |
|  |  |
|  |  |
| REVISE PUBLIC RELATIONS MAJOR | Hours Credit |
| Third Year | 34 |
| MGT BUAD 201 | 3 |
| PSYC 110* | 3 |
| JREM 333 or JREM 375 or JREM 412 or JREM 414 or JREM 430 | 3 |
| PBRL 310 | 3 |
| PBRL 320 | 3 |
| PBRL 340 | 3 |
| PBRL 370 | 1 |
| PBRL 380 | 3 |
| CMST 240** | 3 |
| MARK 300 | 3 |
| ${ }^{5}$ Arts and Sciences Elective* |  |
| Fourth Year | 3 |
| PSYC 360 | 3 |
| PBRL 470 | 3 |
| CMST 442 or PSYC 440 | 3 |
| ${ }^{6}$ College Elective | 3 |
| JREM 400 | 3 |
| ${ }^{5}$ Arts and Sciences Electives | 3 |
| ${ }^{7}$ General Elective | 9 |

## SCHOOL OF JOURNALISM AND ELECTRONIC MEDIA

REVISE JOURNALISM AND ELECTRONIC MEDIA MAJOR

## Footnotes

${ }^{6}$ Four courses selected in consultation with feculty advisor. Four upper-level courses ( 12 hours) of journalism and electronic media. Students are encouraged to select courses from a specialty area including sports journalism, science journalism, media management, print/web journalism, broadcast journalism, visual communication, and magazine journalism.

# COLLEGE OF EDUCATION, HEALTH, AND HUMAN SCIENCES 

## All changes effective Fall 2011

## INFORMATION ITEM

## ADD INTEREST MAJOR CODES

- Child and Family Studies Interest
- Nutrition Interest
- Hotel Restaurant \& Tourism Interest
- Retail and Consumer Science Interest
- Special Education-Communication Disorders Interest
- Special Education-Education of the Deaf and Hard of Hearing Interest
- Special Education-Educational Interpreting Interest
- Special Education—Modified and Comprehensive Interest


## PART I. COURSE CHANGES

## DEPARTMENT OF CHILD AND FAMILY STUDIES

(245) (CFS) Child and Family Studies

DROP (DE) PREREQUISITE, ADD REGISTRATION RESTRICTION
312 Families in Middle and Later Adulthood (3)
Registration Restriction: Minimum student level: junior.
Formerly: (DE) Pre-requisite (s): 210 and no restriction.

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DROP (DE) PREREQUISITE, ADD COMMENT
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490 Practicum: Research (3-12)
Comment: Consent of instructor.
Formerly: (DE) Prerequisite(s): 405.

## DEPARTMENT OF EDUCATIONAL PSYCHOLOGY \& COUNSELING

(271) (CSE) Cultural Studies in Education

ADD
300 Social Justice, Education and Service Learning (3) A study of selected concepts, theories and policies related to social justice within the American education system.
Recommended Background: English 101 and 102 or equivalent.

DEPARTMENT OF KINESIOLOGY, RECREATION, AND SPORT STUDIES
(590) (KNS) Kinesiology

REVISE REPEATABILITY
426 Practicum in Kinesiology II (1-6 hours)
Repeatability: May be repeated. Maximum 6 hours.
Formerly: Repeatability: May be repeated. Maximum 10 hours.

## 200 Special Topics I (1)

Repeatability: May be repeated if topic differs. Maximum 6 hours combined for 200 and 201.
Formerly: Repeatability: May be repeated if topic differs. Maximum 6 hours.

## ADD REPEATABILITY

201 Special Topics II (2)
Repeatability: May be repeated if topic differs. Maximum 6 hours combined for 200 and 201.

## (850) (RSM) Recreation and Sport Management

REVISE (RE) PREREQUISITE
320 Therapeutic Recreation and Special Populations (3)
(RE) Prerequisite: 290.
Formerly: (RE) Prerequisite(s): 290 or consent of instructor.

REVISE REGISTRATION RESTRICTION
325 Therapeutic Recreation and Lifestyle Planning (3)
Registration Restriction(s): Recreation and sport management major.
Formerly: Registration Restriction(s): Recreation and sport management major or consent of instructor.

## 420 Principles of Therapeutic Recreation (3)

Registration Restriction(s): Recreation and sport management major.
Formerly: Registration Restriction(s): Recreation and sport management major or consent of instructor.

## DEPARTMENT OF NUTRITION

## (726) (NUTR) Nutrition

ADD (RE) PREREQUISITE
423 Nutrition Counseling Application
(RE) Prerequisite(s): 422.

## DEPARTMENT OF RETAIL, HOSPITALITY AND TOURISM MANAGEMENT

## (514) (HRT) Hotel, Restaurant, \& Tourism

## ADD

361 Issues and Trends in Customer Service (3) Building competencies in providing outstanding customer service in retail organizations. This course will create a unified approach to customer service, recognizing the importance of store environment planning, organizational policies, and internal marketing that will lead to increased business by attracting and retaining desired customers.
(RE) Prerequisite(s): Hotel, Restaurant, and Tourism 210 or 211.

DROP (SECONDARY CROSS-LIST)
$\dagger 360$ Issues and Trends in Customer Service (3)

DROP
341 Food Safety and Sanitation for the Food Service Industry; Hazard Analysis Critical Control Point (HACCP)

## (865) (RCS) Retail and Consumer Science

$\dagger \mathbf{3 6 0}$ Issues and Trends in Customer Service (3)
Equivalency Table

| Current Courses | Equivalent Course Effective Fall 2011 <br> Hotel, Restaurant, and Tourism (HRT) |
| :---: | :---: |
| 360 |  |
| Restaurant, and Tourism (HRT) |  |
| 360 |  |

## ADD

425 Retail Category Management (3) The application of software technology in retail space planning, and vendor category management. Utilizes JDA software to analyze shelf and floor space planning within retail settings, using both vendor and retailer data.
(RE) Prerequisite(s): 210 and 310.
435 Retail Planning and Allocation (3) The application of software technology in retail merchandising, planning and allocation systems. Utilizes JDA software to apply basic knowledge of buying functions (RCS 310) to planning and allocation of goods using simulations with real-world data.
(RE) Prerequisite(s): 210 and 310.

## DROP

415 Retail Promotion (3)

## REVISE TITLE, REVISE DESCRIPTION

376 Customer Relationship Management and Retail Analytics (3) Provides students with an understanding of the concepts and practices of customer relationship management in retail. Emphasis is on how the concepts can be integrated into actual decision making in the retail organizations. Analytical skills are developed through case studies and the use of various statistical techniques. Students learn how to obtain and analyze retail databases and how to utilize the information to solve retail problems.

Formerly: Strategies for Growth (3) Issues concerning achievement of business growth with focus upon the consumer, operational, and financial dimensions of the service industry.

## REVISE TITLE, REVISE DESCRIPTION, REVISE CREDIT HOURS

310 Retail Buying and Merchandising (3) Analysis of the merchandise buying function within different types of retail organizations and structures, using industry mathematical formulae. Introduction to principles associated with retail buying, planning, and allocation. Mathematical problems and cases, with emphasis on Excel.

Formerly: Retail Buying and Planning (4) Analysis of the merchandise buying function within different types of retail organizations and structures. Application of principles associated with retail buying, planning, and allocation. Computer simulations with emphasis on Excel.

## DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

## (642) (MEDU) Mathematics Education

## ADD (PRIMARY CROSS-LIST)

$\dagger 432$ Knowing and Learning in Mathematics and Science (3) Study of learning theory and how knowing and learning occur in mathematics and the sciences, including content and evolution of scientific and mathematical knowledge; current instructional practices including modeling effective direct teaching, problem solving strategies, questioning strategies and inquiry-based learning. (RE) Corequisite(s): Interdisciplinary Programs 110 and 120.
$\dagger 433$ Classroom Interactions in Mathematics and Science (3) Examination of the interplay between teachers, students, and content, and how such interactions enable students to develop conceptual understanding of mathematics and science; study of connections between content and pedagogy for effective teaching of science and mathematics.
(RE) Prerequisite(s): Interdisciplinary Programs 110 and 120; Mathematics Education 432 or Science Education 432; Cumulative GPA of 2.7 or higher.
†434 Project Based Instruction (3) Capstone course in VolsTeach program; integration of content in mathematics and science learning, infusion of technology in representation, analysis, modeling, assessment and contextualization of content, field-based experiences, and equity.
(RE) Prerequisite(s): Interdisciplinary Programs 110 and 120; Mathematics Education 432 or Science Education 432; Mathematics Education 433 or Science Education 433.
Registration Restriction: Admission to Teacher Education.
†435 Apprentice Teaching in Mathematics and Science (6) Intensive teaching and teaching-related experiences in secondary mathematics or science classrooms in public schools.
(RE) Prerequisite(s): Interdisciplinary Programs 110 and 120; Mathematics Education 432 or Science Education 432; Mathematics Education 433 or Science Education 433; Mathematics Education 434 or Science Education 434.
Registration Restriction: Admission to Teacher Education.

ADD REGISTRATION RESTRICTION, DROP COMMENT
485 Teaching Mathematics Grades 7-12 (3)
(RE) Registration Restriction: Admission to Teacher Education or consent of Instructor.
Formerly: Comment(s): Admission to teacher education required.

## (899) (SCED) SCIENCE EDUCATION

ADD (SECONDARYY CROSS-LIST)
$\dagger 432$ Knowing and Learning in Mathematics and Science (3) (See Mathematics Education 432.)
$\dagger 433$ Classroom Interactions in Mathematics and Science (3) (See Mathematics Education 433.)
$\dagger 434$ Project Based Instruction (3) (See Mathematics Education 434.)
†435 Apprentice Teaching in Mathematics and Science (6) (See Mathematics Education 435.)

## ADD REGISTRATION RESTRICTION, DROP COMMENT

496 Teaching Science Grades 7-12 (3)
Registration Restriction: Admission to Teacher Education or consent of Instructor.
Formerly: Comment(s): Admission to Teacher Education required.

## II. PROGRAM CHANGES

## REVISE COLLEGE TEXT (DEGREES AND MAJORS)

Bachelor of Science in Education - art education major; special education major (concentrations in education of the deaf and hard of hearing, educational interpreting, modified and comprehensive special education); kinesiology major; recreation and sport management major (concentrations in sport management and therapeutic recreation).
Bachelor of Science in Health and Human Sciences - child and family studies major and nutrition major.
Bachelor of Science in Service Management - hotel, restaurant, and tourism major and retail and consumer sciences major. Bachelor of Science in Retail, Hospitality, and Tourism Management - hotel, restaurant, and tourism major and retail and consumer sciences major.

## REVISE COLLEGE TEXT (MINORS)

The academic departments within the College of Education, Health, and Human Sciences offer minors in child and family studies, elementary education (for Arts and Sciences students only), middle grades education (for Arts and Sciences students only), nutrition, restaurant and food service management, retail and consumer sciences, retail technology, secondary education (for Arts and Sciences students only), and tourism and hospitality management.

## DEPARTMENT OF CHILD \& FAMILY STUDIES

REVISE CHILD AND FAMILY STUDIES MAJOR (DROP EIGHT SPECIALTY AREAS IN FOOTNOTE 8)

- Adulthood and Aging
- Advanced Research
- Child and Family Studies Skills - Interpersonal Communication
- Child and Family Studies Skills - Public Policy
- Child and Family Studies Skills - Writing and Mass Media
- Family and Community Services
- Health and Wellness
- Women and Families


## REVISE CHILD AND FAMILY STUDIES MAJOR (REVISE FIVE SPECIALTY AREAS IN FOOTNOTE 8)

## Advanced Child Development

- Add CFS 481 - Research in Child and Family Studies


## Child and Family Diversity

- Add CFS 312 - Families in Middle and Later Adulthood
- Add CFS 481 - Research in Child and Family Studies
- Add NURS 400 - Aging and Society
- Add REST 320 - Women and Religion
- Add WOST 220 - Women in Society
- Add WOST 360 - Women in Cross-Cultural Perspective
- Add WOST 382 - Philosophy of Feminism
- Add WOST 434 - Psychology of Gender


## Family Life Education

- Add CFS 481 - Research in Child and Family Studies
- Add CMST 312 - Survey of Interpersonal Communication
- Add CMST 352 - Communication Theory
- Add CMST 410 - Family Communication
- Add CMST 412 - Close Relationships
- Add CMST 414 - Persuasion
- Add CMST 419 - Interpersonal Conflict


## Child and Family Studies Skills-Working with Children

- Title change only (no changes to course options)


## Children and Families At-Risk/Community Services

- Add CFS 481 - Research in Child and Family Studies
- Add CMST 210 - Public Speaking
- Add CMST 416 - Interpersonal Health Communication
- Add CMST 442- Organizational Communication Processes
- Add PBRL 270 - Public Relations Principles
- Add PHIL 345246 - Bioethics
- Add POLS 311 - Contemporary Issues in American Public Policy
- Add POLS 312 - Popular Culture and American Policies
- Add POLS 340 - Introduction to Public Administration and Public Policy
- Add PSYC 430 - Health Psychology
- Add PUBH 300 - Introduction to Public Health
- Add PUBH 305 - Disease Epidemiology, Prevention, and Control
- Add SOCI 110 - Social Justice and Social Change
- Add SOWK 200 - Introduction to Social Work
- Add SOWK 250 - Social Welfare
- Add UNST 311 - AIDS and Society
- Add WOST 340 - Women, Politics and the Law


## DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

## DEPARTMENT OF KINESIOLOGY, RECREATION AND SPORT STUDIES

## REVISE PROGRESSION TEXT—KINESIOLOGY MAJOR (SECOND PARAGRAPH)

## Progression and Retention Requirements

Students must be admitted to the kinesiology major prior to the completion of 75 hours of coursework. Hours earned through AP credit or dual enrollment while in high school do not count toward this total. Only in exceptional circumstances will students be admitted to the major if more than 75 hours of college coursework have been completed, either at the University of Tennessee of elsewhere. Applications to the Kinesiology major can be obtained by visiting HPER 322. Once the application is complete and all requirements are met, students will be scheduled for a transcript evaluation with a Kinesiology faculty member.

## REVISE KINESIOLOGY MAJOR (FOOTNOTE 5)

${ }^{5}$ Select courses from KNS 231 , KNS 290 , KNS 370 , KNS 380 , KNS 426 , KNS 440 , KNS 450 , KNS 490 , KNS 493 , KNS 497 ; RSM 320 , RSM 335 , RSM 336 , RSM 370 , RSM 415 , RSM 425 , RSM 450 ; ACCT 200 ; ANTH 480 ; any BCMB course; BIOL 101, BIOL 102, BIOL 130 , BIOL 140 ; MGT BUAD 201 ; CFS 210 ; CHEM 350 , CHEM 358 , CHEM 360 , CHEM 368, CHEM 369 ; CLAS 273 ; CMST 416 ; COSC 100 ; ECON 201 ; EEB 240 ; EDPY 460; FINC 300 ; PUBH 300 , PUBH 305 , PUBH 311 ; MARK 300 ; MICR 210 ; MGT 300 ; NURS 351 ; NUTR 302 ; PHIL 244 243-, PHIL 252 246; PSYC 210, PSYC 220 , PSYC 300 , PSYC 310 , PSYC 320 , PSYC 330 , PSYC 360 , PSYC 382 , PSYC 400 , PSYC 410 , PSYC 430, PSYC 431, PSYC 434 , PSYC 435 , PSYC 440 , PSYC 461 , PSYC 470 , PSYC 475 , PSYC 480 , PSYC 482 , PSYC 496 ; STAT 201 . Professional electives must be passed with a minimum grade of "C." Other courses not listed here may be petitioned to count as kinesiology professional electives with approval of the assigned kinesiology faculty advisor. Check with advisor prior to taking the course. Courses selected as professional electives cannot be used to fulfill additional requirements in the program.

REVISE RECREATION AND SPORT MANAGEMENT MAJOR—SPORT MANAGEMENT CONCENTRATION

| Second Year | Hours Credit |
| :--- | ---: |
| ${ }^{2}$ ACCT 200 | 3 |
| ${ }^{2}$ ECON 201* | 4 |
| ${ }^{1}$ Natural Sciences Electives* | $7-8$ |
| CMST 210* or CMST 240* | 3 |
| RSM 250, RSM 290 | 6 |
| ${ }^{2}$ MGT BUAD 201 | 34 |
| ${ }^{2}$ STAT 201* | 3 |
|  |  |
| Fourth Year |  |
| ${ }^{3}$ RSM 490 |  |
| $\quad$ Relect five courses: KNS 490; RSM 330, RSM 336, RSM 340, | 12 |
| $\quad$ 430, RSM 440, RSM 450, RSM 460 |  |
| ${ }^{6}$ General Electives | 15 |

REVISE RECREATION AND SPORT MANAGEMENT MAJOR—THERAPEUTIC RECREATION CONCENTRATION

## Second Year

CLAS 273 3
${ }^{2}$ BCMB 230 5
CMST 210* or CMST 240* 3
${ }^{6}$ Elective 3
${ }^{3}$ RSM 290, RSM 320, RSM 325 9
PHIL 252 246* 3
${ }^{1}$ Cultures and Civilizations* 6

## DEPARTMENT OF RETAIL, HOSPITALITY AND TOURISM MANAGEMENT

DROP BACHELOR OF SCIENCE IN SERVICE MANAGEMENT DEGREE
ADD BACHELOR OF SCIENCE IN RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT DEGREE

```
|DROP:
        HOTEL, RESTAURANT, AND TOURISM MAJOR, BS IN SERVICE MANAGEMENT
        RETAIL AND CONSUMER SCIENCES MAJOR, BS IN SERVICE MANAGEMENT
* ADD:
        HOTEL, RESTAURANT, AND TOURISM MAJOR, BS IN RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT
        RETAIL AND CONSUMER SCIENCES MAJOR, BS IN RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT
```

REVISE HOTEL, RESTAURANT, AND TOURISM MAJOR
Second Year Hours Credit
${ }^{2}$ ACCT 200
${ }^{2}$ STAT 201*3
${ }^{2}$ ECON 201* ..... 4
Social Sciences Elective*
34
${ }^{2}$ MGT BUAD 2013
HRT 211 ..... 3
HRT 224 ..... 3
HRT 311 ..... 3
HRT 212 ..... 3
Third Year
${ }^{2}$ MARK 300 ..... 3
CMST 240* ..... 3
Cultures and Civilizations Elective* ..... 3
RCS 341 ..... 3
HRT 326 ..... 3
HRT 361360 ..... 3
${ }^{1}$ Hotel, Restaurant, and Tourism Elective ..... 3
HRT 390* ..... 3
HRT 392 ..... 3
Elective ..... 43
REVISE RETAIL AND CONSUMER SCIENCES MAJOR

| Second Year | Hours Credit |
| :--- | ---: |
| Cultures and Civilizations Elective* | 3 |
| STAT 201* | 3 |
| ECON 201* | 4 |
| Social Sciences Elective* | 3 |
| ACCT 200 | 3 |
| MGT BUAD 201 | 34 |
| RCS 210, RCS 341 | 6 |
| Elective | 43 |
| Third Year |  |
| MARK 300 | 3 |
| MGT 300 | 3 |
| CMST 240* | 3 |
| RCS 310, RCS 311, RCS 346, RCS 376, RCS 390* | 3 |
| RCS 422 | 16 |
| Fourth Year | 6 |
| FINC 300 | 3 |
| RCS 360 | 3 |
| RCS 410 | 3 |
| RCS 412 415 | 3 |
| RCS 421 | 3 |
| 1Retail and Consumer Sciences Electives | 3 |
| Electives | 129 |

Cultures and Civilizations Elective* ..... 3
STAT 201*4
Social Sciences Elective*3
MGT BUAD 201 ..... 34
Elective ..... 43
Third YearMGT 3003RCS 310, RCS 311, RCS 346, RCS 376, RCS 390*15163
RCS 300 ..... 3
RCS 412415 ..... 3
${ }^{1}$ Retail and Consumer Sciences Electives ..... 1296

[^10]
## $\diamond$ ADD RETAIL TECHNOLOGY MINOR

## Minor Requirements

The minor consists of 15 credit hours.

## Complete:

RCS 210 - Introduction to Retail Management
RCS 310 - Retail Buying and Planning
RCS 376 - Customer Relationship Management and Retail Analytics
RCS 425 - Retail Category Management
RCS 435 - Retail Planning and Allocation

## REVISE RESTAURANT AND FOOD SERVICE MANAGEMENT MINOR

## Minor Requirements

The minor consists of 1516 hours.

## Complete:

HRT 101 - Science of Foods
HRT 210 - Foodservice Operations Management
HRT 341-Food Safety and Sanitation for the Food Service Industry; Hazard Analysis Critical Gontrol Point (HACCP)
HRT 445 - Advanced Food Production and Service Management

## Select 6 hours:

any Hotel, Restaurant and Tourism courses

## REVISE RETAIL AND CONSUMER SCIENCES MINOR

## Minor Requirements

The minor consists of 15 hours.

## Complete:

RCS 210 - Introduction to Retail Management
RCS 341 - Consumers in the Marketplace

## Select 9 hours:

RCS 310 - Retail Buying and Planning
RCS 311 - Human Resource Management in Hospitality and Retailing
RCS 320 - Product Development
RCS 346 - Retail Operations Management
RCS 376 - Customer Relationship Management and Retail Analytics
RCS 411 - Entrepreneurship and Small Business Management
RCS 412 - e-Retailing
RCS 415 - Retail Promotion
RCS 421 - International Retailing
RCS 425 - Retail Category Management
RCS 435 - Retail Planning and Allocation
RCS 480 - Retail Marketing Planning and Execution
RCS 484 - International Retail Industry Study Tour
RCS 495 - Special Topics

## DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

## REVISE COLLEGE TEXT—PROGRESSION TO A MAJOR, CONC, OR PROGRAM SECTION (ADD PARAGRAPH TO END)

## VolsTeach

Students pursuing a major in selected programs in the College of Arts and Sciences are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu), which permits students to simultaneously complete a major in mathematics or science and receive secondary education teaching licensure within this 4 -year undergraduate degree minor. For more information
about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).

## REVISE COLLEGE TEXT (ADMISSION TO TEACHER EDUCATION SECTION)

2. Minimum number of hours completed and required courses for Admissions Board Interviews:
a. 45 credit hours for agriculture education, art education, music education, special education, and VolsTeach math and science secondary education; 60 credit hours for preK-K education, elementary education, and middle grades education; 75 credit hours for secondary education (English, English as a Second Language, foreign language education, social sciences); and 90 credit hours for early childhood education.

## REVISE COLLEGE TEXT—BOARDS OF ADMISSION IN TEACHER EDUCATION SECTION (ADD PARAGRAPH TO END)

## Admission into the Teacher Education Program through VolsTeach (Secondary Math and Sciences)

VolsTeach applicants will be reviewed by VolsTeach faculty from their academic discipline and teacher education as well as master teachers. Admission to Teacher Education through VolsTeach is based upon performance throughout the VolsTeach courses, performance in content-area courses, and demonstration of skills and dispositions needed to be an effective teacher. VolsTeach applicants must meet all other progression requirements associated with admission into Teacher Education. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).

## REVISE COLLEGE TEXT (UNIVERSITY-WIDE INVOLVEMENT IN TEACHER EDUCATION SECTION)

Information regarding specific teaching fields and educational specialties is available at the following campus locations.

- Agriculture Education - 325 Morgan Hall
- Art Education - 213 Art and Architecture Building
- Music Education - 211 Music Building
- School Counseling - A525 Bailey Education Complex
- School Psychology - A525 Bailey Education Complex
- Audiology and Speech Pathology - 578 South Stadium Hall
- College of Social Work - 308 Henson Hall
- VolsTeach-100 Greve Hall


## REVISE DEPARTMENT TEXT

## Teaching Minors

Students who are earning a baccalaureate degree in the College of Arts and Sciences and who are also seeking teacher licensure in elementary education, English as a Second Language, English education, foreign language education, mathematics education, music education, science-education, or social science education, are urged to must earn a minor (or the equivalent of a minor) in elementary, English language learning, middle grades, or secondary education. Students who do not earn a minor as a part of their undergraduate studies will be required to complete the equivalent of a minor as a prerequisite to entering the fifth year of professional study. Students interested in secondary mathematics or sciences teacher licensure must participate in the VolsTeach option offered through the College of Arts and Sciences.

Students should note that courses taken to satisfy the minor only partially will not fulfill teacher licensure requirements.

## REVISE ELEMENTARY EDUCATION MINOR (INTRODUCTORY TEXT; ADD PARAGRAPH AFTER FIRST)

Students interested in becoming elementary school teachers (K-grade 6) earn a Bachelor of Art or a Bachelor of Science in the College of Arts and Sciences. While completing requirements for the baccalaureate degree, students are encouraged to complete a minor in elementary education.

## VolsTeach

Students pursuing a major in selected programs in the College of Arts and Sciences are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or science and receive secondary education teaching licensure within this 4 year undergraduate degree minor. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).

## REVISE ENGLISH LANGUAGE LEARNING MINOR (INTRODUCTORY TEXT; ADD PARAGRAPH AFTER FIRST)

Students interested in becoming PreK-12 English as a Second Language teachers typically earn a Bachelor of Arts degree in the College of Arts and Sciences with a major in English, linguistics, or a world language (i.e., Asian Studies, French, German,

Spanish). As part of their degree, they should take ENGL 477 or ENGL 372 ; ENGL 471 (Sociolinguistics) is highly recommended. While completing requirements for the baccalaureate degree, students are encouraged to matriculate a minor in English language learning.

## Vols Teach

Students pursuing a major in selected programs in the College of Arts and Sciences are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or science and receive secondary education teaching licensure within this 4 year undergraduate degree minor. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).

REVISE MIDDLE GRADES EDUCATION MINOR (INTRODUCTORY TEXT; ADD PARAGRAPH AFTER FIRST TWO)
Students interested in becoming middle school teachers (grades 4-8) earn a BA or BS in the College of Arts and Sciences in either mathematics, English, an area of science (e.g., astronomy, biology, chemistry, geology, physical geography, physics, environmental science) or one of the social sciences (e.g., history, geography, political science, anthropology, sociology, economics). Students who have pursued programs in engineering or forestry may have course work that may count in this area.

Students also complete a minor in middle grades education which consists of a minimum of 12 credit hours in one of the other four content areas: mathematics, science, social science, or English, as well as the required courses ( 13 hours) as outlined below. Contact advisors in the college's Student Services Center, A332 Jane and David Bailey Education Complex, for more information about specific requirements. The coursework listed below leads to middle grades licensure.

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Vols Teach
Students pursuing a major in selected programs in the College of Arts and Sciences are eligible to participate in the University's
VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or
science and receive secondary education teaching licensure within this 4 year undergraduate degree minor. For more information
about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in
Mathematics and Science (100 Greve Hall).
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## REVISE SECONDARY EDUCATION MINOR (INTRODUCTORY TEXT)

Students interested in becoming secondary school teachers (Grades 7-12) in English, social sciences, foreign languages, or English as a Second Language earn a Bachelor of Arts or a Bachelor of Science in the College of Arts and Sciences (e.g., English, mathematics, history, etc.). While completing requirements for the baccalaureate degree, students are encouraged to complete a minor in secondary education.

Students interested in becoming secondary school teachers (Grades 7-12) in mathematics or the sciences participate in the VolsTeach program associated with their academic major.

## REVISE SECONDARY EDUCATION MINOR (SPECIALTY STUDIES)

## Specialty Studies:

Chosen from SSCE 454 - Teaching Strategies and Issues in Social Studies Education, FLED 455 Teaching of Foreign Language, Grades 7-12, ENED 459 - Teaching English in the Secondary School, MEDU 485-Teaching of Mathematics, Grades 7-12, SCED 496 SCED 496 - Teaching Science Grades 7-12.

REVISE SPECIAL EDUCATION MAJOR-EDUCATION OF THE DEAF AND HARD OF HEARING CONCENTRATION

## Second Year

CMST 210* or CMST 240* or course with Communicating Orally (OC) designation

## Hours Credit

El 223, El 2263EDPY 210 ..... 3
${ }^{7}$ General Elective ..... 2-3
LING 200 ..... 3
${ }^{5}$ Biological Science Elective* ..... 3-4
${ }^{6}$ Physical Science Elective* ..... 3-4
PHIL 241*, PHIL 243*, PHIL 246*, or PHIL 290* PHIL 244* ..... 3
AUSP 303 ..... 3
First Year Hours Credit
ENGL 101*, ENGL 102*Arts and Humanities Elective*3
Social Sciences Electives* ..... 63
Biology 101*-102* ..... 8
${ }^{1}$ Natural Sciences Electives* ..... 7-8
Elective ..... 3
${ }^{2}$ Physical Science Elective ..... 3
Quantitative Reasoning Electives* ..... 6
CMST 210* or CMST 240* ..... 3
Second Year
CMST 210* or CMST 240* ..... 3
${ }^{3}$ Communicating through Writing (WC) Elective* ..... 3
Non-U.S. History ..... 6
Elective ..... 3
HIST 241*, HIST 242*
63
Arts and Humanities Electives*
Social Sciences Elective*3
EDPY 210
3
AUSP 300
Intermediate Foreign Language* ..... 6
${ }^{1}$ Physical Science Elective
6
Cultures and Civilizations Electives*
2118
Third Year
AUSP 302, AUSP 303, AUSP 305, AUSP 306, AUSP 320, AUSP 435, AUSP 473
3
EDPY 210
3
LING 200
LING 200 ..... 6
Electives ..... 6
Fourth Year

| AUSP 431, AUSP 433, AUSP 435, AUSP 440, AUSP 461, AUSP 475, and AUSP 494 | 1315 |
| :--- | ---: |
| AUSP 433 | 1 |
| EDDE 425 | 3 |
| SPED 470 | 3 |
| RSM 425 | 3 |
| ${ }^{2}$ Electives | 3 |

Total 120-121

* Meets University General Education Requirement.${ }^{1}$ ASTR 151, ASTR 152, ASTR 161, ASTR 162, ASTR 217, ASTR 218; CHEM 100, CHEM 110,CHEM 120, CHEM 128, CHEM 130, CHEM 138; GEOG 131, GEOG 132; GEOL 101, GEOL 102 ,GEOL 103, GEOL 107, GEOL 108, GEOL 201, GEOL 202, GEOL 203, GEOL 205, GEOL 207,GEOL 208; PHYS 101, PHYS 102, PHYS 135, PHYS 136, PHYS 137, PHYS 138, PHYS 161, PHYS
221, PHYS 222, PHYS 231, PHYS 232. Select wourses from the Natural Sciences list-
University General Education Requirement. At least one of the courses must have a lab.
${ }^{2}$ Recommended Electives: additional Educational Interpreting (EI) courses; continue foreign
language beyond the intermediate level; calculus if pursuing audiology; additional courses in
Education of the Deaf and Hard of Hearing (EDDE).
ASTR 151, ASTR 152, ASTR 161, ASTR 162, ASTR 217, ASTR 218; CHEM 100, CHEM 110, CHEM120, GHEM 128, GHEM 130, GHEM 138; GEOG 131, GEOG 132; GEOL 101, GEOL 102, GEOL103, GEOL 107, GEOL 108, GEOL 201, GEOL 202, GEOL 203, GEOL 205, GEOL 207, GEOL 208;PHYS 101, PHYS 102, PHYS 135, PHYS 136, PHYS 137, PHYS 138, PHYS 161, PHYS 221, PHYS222, PHYS 231, PHYS 232. At least one of the courses must have a laboratory.
${ }^{3}$ Any course with a (WC) designation satisfies this requirement.
Note: Progression to the Communication Disorders concentration requires a 3.0 cumulative GPA aftera minimum of 60 semester credits and completion of AUSP 300. Students must maintain a 3.0 GPAwhile in the program. Students must earn a grade of $C$ or better in all AUSP classes.
REVISE SPECIAL EDUCATION MAJOR—MODIFIED AND COMPREHENSIVE SPECIAL EDUCATION CONC
Second Year3
${ }^{5}$ Non-US History ..... 6
Geography Elective 3
${ }^{1}$ Biological Science Electives* 8
${ }^{2}$ Foreign Language* 6


## COLLEGE OF ENGINEERING

## All changes effective Fall 2011

## PART I. COURSE CHANGES

## DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING

## (223) (CBE) Chemical and Biomolecular Engineering

DROP (RE) COREQUISITE, ADD (DE) COREQUISITE
201 Material and Energy Balances (4)
(DE) Corequisite(s): 250 and Engineering Fundamentals 230.
Formerly: (RE) Corequisite(s): 250 and Engineering Fundamentals 230.

## ADD GENERAL EDUCATION DESIGNATION

*488 Honors: Design Internship in Green Engineering (3)
Satisfies General Education Requirement: (OC)

## *490 Process Design and Economic Analysis (3)

Satisfies General Education Requirement: (OC)

## DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

## (254) (CE) Civil Engineering

DROP (RE) PREREQUISITE, ADD (DE) PREREQUISITE, ADD REGISTRATION RESTRICTION
355 Transportation Engineering I (3)
(DE) Prerequisite(s): 210.
Registration Restriction(s): Civil and environmental engineering majors only. Minimum student level - sophomore.
Formerly: (RE) Prerequisite 210.

## REVISE (RE) PREREQUISITE

391 Water Resources Engineering I (3)
(RE) Prerequisite(s): Mathematics 231 and Engineering Fundamentals 152.
Formerly: (RE) Prerequisite(s): Mathematics 241 and Engineering Fundamentals 152.

REVISE REGISTRATION RESTRICTION
*205 Professional Development I (2)
Registration Restriction(s): Civil and environmental engineering majors only. Minimum student level - sophomore. Formerly: Minimum student level - sophomore.

## 210 Geomatics (4)

Registration Restriction(s): Civil and environmental engineering majors only. Minimum student level - sophomore.
Formerly: Minimum student level - sophomore.

## 440 Civil Engineering Systems Design and Management (3)

Registration Restriction(s): Civil and environmental engineering majors only. Minimum student level - junior.
Formerly: Minimum student level - junior.
442 Construction Methods and Equipment (3)
Registration Restriction(s): Civil and environmental engineering majors only. Minimum student level - senior.
Formerly: Minimum student level - senior.

## ADD REGISTRATION RESTRICTION

262 Structural Mechanics (3)
Registration Restriction(s): Civil and environmental engineering majors only.

## DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE (266) (COSC) Computer Science

ADD
312 Algorithm Analysis and Automata (3) Counting and combinatorics, with applications to the analysis of algorithms. Introduction to finite automata and regular languages, and to pushdown automata and context free grammars.
(RE) Prerequisite(s): 311.

361 Operating Systems (3) Threads, operating system structure, process management, scheduling, synchronization, deadlock, memory management, virtual memory and demand paging, file system management and implementation, mass storage structure, protection, security, and distributed systems.
(RE) Prerequisite(s): 360.

440 Formal Foundations of Software Engineering (4) Principles of analysis and design of information systems. Principles of program design and verification, formal objects, formal specifications.
Contact Hour Distribution: 3 hours lecture and 1 lab.
(RE) Prerequisite(s): 311.

462 Parallel Programming (3) Principles and practice of parallel computing; design, implementation, and evaluation of parallel programs for shared and distributed memory architectures, and vector processors. Sample topics include models of parallel computers, basic communication operations, performance and scalability of parallel systems, and programming techniques including multi-threading and message passing.
(RE) Prerequisite(s): 361.

465 Databases and Scripting Languages (3) Introduction to database theory, models, and query formation. Survey of scripting languages, their uses, and their interconnectivity with databases.
(RE) Prerequisite(s): 311, 365.

482 Theory of Computation (3) Properties of finite automata/regular sets and push-down automata/context-free languages. Countability, diagonalization, and undecidability. Complexity, including the classes P and NP, NP-completeness, and reduction techniques.
(RE) Prerequisite(s): 312.

DROP
380 Theory of Computation (3)
430 Advanced Topics in Hardware Systems (3)
470 Advanced Topics in Scientific Computation (3)
460 Advanced Topics in Software Systems (3)
480 Advanced Topics in Theoretical Computer Science (3)

## REVISE CREDIT HOURS, DROP CONTACT HOUR DISTRIBUTION

## *100 Introduction to Computers and Computing (3)

Formerly: (4) Contact Hour Distribution: 3 hours and 1 lab.

## REVISE TITLE, REVISE DESCRIPTION, REVISE (RE) PREREQUISITE

140 Data Structures and Algorithms I (4) Advanced problem solving and algorithm development, programming, data structures and applications, I/O techniques, lists, queues, stacks, hash tables, algorithms, files.
(RE) Prerequisite(s): 102 or Electrical and Computer Engineering 206.
Formerly: Data Structures (4) Advanced problem solving and algorithm development, structured programming, data structures and
applications, I/O techniques, lists, queves, trees, algorithms, files.
(RE) Prerequisite(s): 102.

## REVISE (RE) PREREQUISITE

## 160 Computer Organization (4)

(RE) Prerequisite(s): 102 or Electrical and Computer Engineering 206.
Formerly: (RE) Prerequisite(s): 102.

## REVISE TITLE, REVISE DESCRIPTION

302 Data Structures and Algorithms II (4) Design, analysis, and implementation of fundamental algorithms and data structures, including trees and graphs.
Formerly: Fundamental Algorithms (4) Design, analysis, and implementation of fundamental algorithms, such as sorting and searching, and their data structures.

420 Biologically-Inspired Computation (3) Recent developments in computational methods inspired by nature, such as neural networks, genetic algorithms, evolutionary programming, ant-swarm optimization, artificial immune systems, swarm intelligence, cellular automata, multi-agent systems, cooperation, and competition.
Formerly: 420 Advanced Topics in Machine Intelligence (3) Topics such as search, learning, expert systems, neural networks, pattern recognition and natural language processing. Emphasis on faculty research.

## REVISE DESCRIPTION

311 Discrete Structures (3) Sets, functions, relations, equivalence relations, partial orderings and proof techniques, especially mathematical induction. Application of proof techniques to prove correctness of algorithms. Introduction to basic counting and combinatorics.
Formerly: Equivalence relations, partial orderings. Combinations, permutations, analysis of algorithms. Finite automata and regular languages.

## REVISE TITLE, REVISE CREDIT HRS, REVISE DESCRIPTION, REVISE (RE) PREREQUISITE, DROP CONTACT HR DISTRIB

340 Software Engineering (3) Introduction to software processes that can be used on large projects to help design, manage, maintain, and test software.
(RE) Prerequisite(s): 302.
Formerly: Foundations of Software Engineering (4) Principles of analysis and design of information systems. Principles of program design and verification, formal objects, formal specifications.
Contact Hour Distribution: 3 hours lecture and 1 lab.
(RE) Prerequisite(s): 311.

## REVISE DESCRIPTION, REVISE (RE) PREREQUISITE

360 Systems Programming (4) In-depth introduction to C and its use in system programming. Introduction to memory and process layout, system calls, buffering, file I/O, file systems, directories, metadata, assembly code, stack frames, memory management, process management, and interprocess communication.
(RE) Prerequisite(s): 302; 160 or Electrical and Computer Engineering 355.
Formerly: Introduction to user-level systems programming, file control, process control, memory management, system utilities, network programming.
(RE) Prerequisite(s): 160, 302.

## REVISE CREDIT HOURS, DROP CONTACT HOUR DISTRIBUTION

365 Programming Languages and Systems (3)
Formerly: (4), Contact Hour Distribution: 3 hours and 1 lab.

## 370 Introduction to Scientific Computing (3)

Formerly: (4), Contact Hour Distribution: 3 hours and 1 lab.

## REVISE (RE) PREREQUISITE, DROP (DE) PREREQUISITE

## 425 Machine Learning (3)

(RE) Prerequisite(s): 302; Electrical and Computer Engineering 313 or Mathematics 323.
Formerly: (RE) Prerequisite(s): 302, 311.
(DE) Prerequisite(s): Mathematics 142 and 251, Mathematics 323 or ECE 313.

## (319) (ECE) Electrical and Computer Engineering

ADD
454 Computer and Network Security (3) Basic security concepts, secret key cryptography, public key cryptography, hashes and message digests, program security, operating system security, authentication and public key infrastructure, security protocols, SSL/TLC, IPsec/VPN, electronic mail security, firewalls, web security, DDoS attacks and defense.
(RE) Prerequisite(s): 206 or Computer Science 102.

## REVISE DESCRIPTION

313 Probability and Random Variables (3) Set theory, axioms of probability, Bayes' theorem. Discrete and continuous random variables and probability density functions. Expectation, sample mean and variance. Central limit theorem. Parameter estimation and hypothesis testing.
Formerly: Axioms of probability, set theory, independence, conditional probability, Bayes' theorem, permutations and combinations, histograms, probability density, central limit theorem, samples and populations, sample mean and variance, curve fitting, and correlation of time signals.

## REVISE (RE) PREREQUISITE

342 Analog Communication Amplitude and Frequency Modulation (3)
(RE) Prerequisite(s): 313, 315.
Formerly: (RE) Prerequisite(s): 315.

Rationale: 342 requires material from both 313 and 315 . Impact on other academic units: None. Financial impact: None.
355 Computing System Fundamentals (3)
(RE) Prerequisite(s): 206 or Computer Science 102.
Formerly: (RE) Prerequisite(s): 206, 255.

## 453 Introduction to Computer Networks (3)

(RE) Prerequisite(s): 206 or Computer Science 102.
Formerly: (RE) Prerequisite(s): 206.

## ENGINEERING FUNDAMENTALS DIVISION

## (323) (EF) Engineering Fundamentals

## ADD AND REQUEST VARIABLE TITLE PERMISSION

491 International Experience in Engineering (1-6) Participation in approved engineering academic experience abroad.
Repeatability: May be taken once for credit.
Registration Restriction(s): Students in the College of Engineering and Biosystems Engineering with approval of instructor.

## REVISE REGISTRATION RESTRICTION, ADD RECOMMENDED BACKGROUND

*157 Honors: Physics for Engineers I (4)
Recommended Background: At least one year of high school physics.
Registration Restriction(s): Majors in the College of Engineering or Biosystems Engineering who are in the Chancellor's Honors or Haslam Scholars Program with a math ACT of 31 or higher.

Formerly: Registration Restriction(s): Majors in the College of Engineering or Biosystems Engineering who are in the Chancellor's Honors Program.

DROP REGISTRATION RESTRICTION

## *158 Honors: Physics for Engineers II (4)

Formerly: Registration Restriction(s): Majors in the College of Engineering or Biosystems Engineering who are in the Chancellor's Honors Program.

## (556) (IE) Industrial Engineering

ADD
200 Engineering Data Analysis (3) Introduction to probability concepts, probability distributions, data collection, descriptive statistics, discrete distributions, continuous distributions, estimation of means, confidence intervals, hypothesis tests, regression, and correlation. Emphasis on industrial engineering techniques for data collection, data analysis, and engineering probability and statistics.
(RE) Prerequisite(s): Mathematics 142 or 148.

DROP
330 Manufacturing Materials/Processes (3)

## REVISE TITLE, REVISE DESCRIPTION, REVISE (RE) COREQUISITE, ADD (RE) PREREQUISITE, DROP CONTACT HR DISTR

202 Work Measurement and Introduction to Manufacturing Processes (3) Introduction to methods, standards, work design, and productivity improvement. Work method design: exploratory, documentation, and analysis tools. Operation analysis: product, process and schedule design. Introduction to facilities layout, work design, work method improvement, time study, learning curves, and wage incentives systems. A survey of manufacturing processes, traditional machining, and non-traditional machining. Fundamental principles and procedures will be applied through a class project developed by students working in teams.
(RE) Prerequisite(s): Engineering Fundamentals 152 or 157.
(RE) Corequisite(s): 200.
Formerly: Work Methods and Measurement (3) Productivity and work design. Techniques of work methods design including flow, activity, and worker machine charts, as well as work methods improvement techniques and procedures. Human work design criteria for the improvement of work methods. Stopwatch time studies, predetermined time systems, and work sampling are used to establish, document, and maintain time standards, standard data, and allowances. Learning curves and wage payment systems.
Contact Hour Distribution: 2 hours lecture and 2 hours lab.
(RE) Corequisite(s): Statistics 251.

## REVISE TITLE, REVISE DESCRIPTION, DROP CONTACT HOUR DISTRIBUTION, DROP REGISTRATION PERMISSION

250 Contemporary Issues in Industrial Engineering I (1) A critical review and discussion of contemporary issues that can potentially impact the practice of industrial engineering. Includes research, analysis, and synthesis activities along with coordinated efforts to discuss relevant aspects of the issues being addressed with an emphasis on developing communication, team-building, and research skills.
Formerly: Sophomore Cooperative Learning Experience (1) Exposure to the real-world practice of industrial engineering. Sophomores will be placed on teams with juniors and seniors and assigned a company or organization to study. The objectives are to develop observation and listening skills, teaming skills, and mentoring skills; and to provide the opportunity to gain a better understanding of industrial engineering as a discipline by observing industrial engineering in action. Students will be required to maintain a journal documenting their individual experiences and reflections, including what the student has learned about effective team playing, the job of a practicing industrial engineer, and what the student was able to learn from or teach fellow team members. Each team will work on a project for the organization or company assigned, scoping and defining some problem of interest, and recommending a solution methodology. These project reports will go into a problem bank that will be used by Industrial Engineering 422 as a source of topics for senior design projects.
Contact Hour Distribution: 2-hour lab.
Registration Permission: Consent of instructor.

## REVISE TITLE, REVISE DESCRIPTION, DROP CONTACT HOUR DISTRIBUTION

* 350 Contemporary Issues in Industrial Engineering II (1) A critical review and discussion of contemporary issues that can potentially impact the practice of industrial engineering. Includes participating in team activities, performing research on assigned topics, participation in class discussions, and an emphasis on written communications.
Formerly: Junior Cooperative Learning Experience (1) Exposure to the real-world practice of industrial engineering. Juniors will be placed on teams with sophomores and seniors and assigned a company or organization to study. The objectives are to develop technical writing skills, teaming skills, and mentoring skills; and to provide the opportunity to apply and integrate course content in the IE curriculum in a real-world context. Students will be required to maintain a journal documenting their individual experiences and reflections, including what the student has learned about effective team playing, the application of industrial engineering in a practical setting, and what the student was able to learn from or teach fellow team members. Each team will work on a project for the organization or company assigned, scoping and defining some problem of interest and recommending a solution methodology. The Industrial Engineering 350 members of the team will be expected to take the lead in writing the final project report. These project reports will go into a problem bank that will be used by Industrial Engineering 422 as a source of topics for senior design projects.
Contact Hour Distribution: 2-hour lab.

450 Contemporary Issues in Industrial Engineering III (1) A critical review and discussion of contemporary issues that can potentially impact the practice of industrial engineering. Includes identification of relevant outcomes and emphasizes the necessary efforts to provide leadership and develop strategies consistent with desired results.
Formerly: Senior Cooperative Learning Experience (1) Exposure to the real-world practice of industrial engineering. Seniors will be asked to lead teams that consist of seniors, juniors, and sophomores. These teams will be assigned a company or organization to study. The objectives are to develop leadership skills, teaming skills, and mentoring skills; and to provide the opportunity to apply and integrate course content in the industrial engineering curriculum in a real-world context. Students will be required to maintain a journal documenting their individual experiences and reflections, including any leadership issues that arose and how the student dealt with them, what the student has learned about effective team playing, the application of industrial engineering in a practical setting, and how the student used his/her knowledge and leadership skills to mentor junior and sophomore members of the team. Each team will work on a project for the organization or company assigned, scoping and defining some problem of interest, and recommending a solution methodology. These project reports will go into a problem bank that will be used by Industrial Engineering 422 as a source of topics for senior design projects.
Contact Hour Distribution: 2-hour lab.

## REVISE (RE) PREREQUISITE, DROP REGISTRATION PERMISSION

## 300 Engineering Data Analysis and Process Improvement (3)

(RE) Prerequisite(s): 200.
Formerly: (RE) Prerequisite(s): Statistics 251.
Registration Permission: Consent of instructor.

## REVISE (RE) PREREQUISITE

## 310 Operation Research in Industrial Engineering II (3)

(RE) Prerequisite(s): 200, 301.
Formerly: (RE) Prerequisite(s): 301 and Statistics 251.

## REVISE DESCRIPTION

301 Operations Research in Industrial Engineering I (3) Integrated system modeling concepts. Linear mathematical programming models including modeling, the simplex procedure, sensitivity analysis, dual theory, transportation, transshipment, and assignment problems, and integer linear programming.
Formerly: Integrated system modeling concepts. Linear mathematical programming models including the original simplex procedure, transportation and assignment problems, revised simplex procedure, dual simplex procedure, parametric linear programming (sensitivity analysis), and integer linear programming.

## REVISE TITLE, REVISE (RE) COREQUISITE

## 401 Facilities Planning and Material Handling (3)

(RE) Corequisite(s): 405.
Formerly: Integrated Manufacturing Systems (3)
(RE) Corequisite(s): 330 and 405.

## REVISE TITLE, REVISE CREDIT HRS, REVISE DESCRIPTION, REVISE (RE) COREQUISITE, REVISE RECOMMENDED BACKGROUND, DROP GRADING RESTRICTION, ADD (RE) PREREQUISITE

404 Industrial Engineering Design I (2) Current real-world problems will be drawn from local production and service organizations and presented by personnel from these organizations. Senior industrial engineering student teams will solve these real-world problems under the guidance of their instructor using industrial engineering methodology. These problems emphasize problem definitions, analysis, and presentation with considerations for engineering standards and realistic economic, environmental, ethical, safety, social, political, and other pertinent constraints.
(RE) Prerequisite(s): 300, 301.
(RE) Corequisite(s): 405.
Recommended Background: Completion of all industrial engineering junior-level courses.
Formerly: Industrial Engineering Applications (1) Enhances and integrates the industrial engineering educational experience in preparing senior industrial engineering students for their transition to professional practice.
Grading Restriction: Satisfactory/No Credit grading only.
(RE) Corequisite(s): 422.
Recommended Background: Completion of one semester of industrial engineering senior-level courses.

## REVISE TITLE, REVISE CREDIT HOURS, ADD (RE) PREREQUISITE, ADD GENERAL EDUCATION DESIGNATION

## * 422 Industrial Engineering Design II (2)

Satisfies General Education Requirement: (OC) (WC)
(RE) Prerequisite(s): 404; English 102 or 118.
Formerly: Senior Problems Analysis (3)

## REVISE DESCRIPTION, REVISE REGISTRATION RESTRICTION, DROP REGISTRATION PERMISSION

405 Engineering Economic Analysis (3) Introduction to engineering economy and its application in engineering practice. Timevalue of money and discounted cash flow techniques. Basic accounting principles. Decisions among engineering alternatives involving design options, equipment selection, break-even points, and similar situations. Cost estimating and consideration of taxes and inflation. Analyzing uncertainty in economic estimates using nonprobabilistic techniques. Introduction to techonomics including transaction cost analysis, concept of techonomic metrics, key trends driving exponential change in the economy and organizations. Registration Restriction(s): Restricted to majors in the College of Engineering or Biosystems Engineering.
Formerly: Introduction to engineering economy and its application in engineering practice. Time-value of money and discounted cash flow techniques. Decisions among engineering alternatives involving design options, equipment selection, break-even points, and similar situations. Cost estimating and consideration of taxes and inflation. Analyzing uncertainty in economic estimates using nonprobabilistic techniques. Introduction to techonomics including transaction cost analysis, concept of techonomic metrics, key trends driving exponential change in the economy and organizations.
Registration Restriction(s): Restricted to majors in the College of Engineering.
Registration Permission: Consent of instructor.

## REVISE DESCRIPTION, REVISE (RE) PREREQUISITE, DROP CONTACT HOUR DISTRIBUTION

406 Simulation (3) Simulation of complex business and industry processes using current simulation software (e.g., Arena) where management, strategic and operational decision making can be enhanced through modeling and analysis. Introduction to modeling concepts, flowcharting, random number generation, design of experiments, simulation logic, computer animation, and optimization. Utilization of statistical tools to analyze inputs and outputs to simulation models. Provides hands-on experiences in developing simulation models for relevant manufacturing and service industry case studies.
(RE) Prerequisite(s): 200.
Formerly: Simulation of complex production processes using current simulation software. Introduction to modeling concepts, flowcharting, random number generation, design of experiments, simulation logic, and computer animation. Utilization of statistical tools to analyze inputs and outputs to simulation models. Lab component provides hands-on experiences in developing simulation models for relevant industrial engineering case studies.
Contact Hour Distribution: 2 hours lecture and 1 lab.
(RE) Prerequisite(s): Statistics 251.

## DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

## (638) (MSE) Materials Science and Engineering

ADD
455 Materials for Energy (3) Underlying physics and operating principles of functional materials used in energy applications such as photovoltaics and photocatalysts, fuel cells, batteries, thermoelectrics, and superconductors.
(RE) Prerequisite(s): 350.
Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.

## DROP

## 220 Selection and Use of Soft Goods Manufacture (3)

Rationale: We have taught this as a service course for undergraduate Interior Design students for a number of years. The Interior Design curriculum has changed and no longer includes this course. Impact on other units: None. Financial impact: None.

## 291 Professional Development II (1)

## REVISE TITLE, REVISE CREDIT HOURS

290 Professional Development (1)
Formerly: Professional Development I (0)

## REVISE DESCRIPTION

445 Polymer Engineering Processing and Characterization Laboratory (3) This is a project-based polymer processing laboratory course. Groups of students will work on specific projects that involve polymer processing and characterization. Each semester-long project includes processing of polymer samples, characterization of mechanical and physical properties of the products, variation of processing parameters to determine effect on properties, and generation of oral and written reports.
Formerly: Polymer film casting, film blowing, mixing, and extrusion are operated and studied. Flow rates, temperatures, pressures, and velocity profiles are acquired and used in finite element modeling and simulation to correlate the polymeric material properties and morphology. Supporting instrumentation includes linear viscoelastic rheometry, capillary viscometry, SEM, OM, FTIR, etc.

## (018) (AE) Aerospace Engineering

ADD REGISTRATION RESTRICTION
341 Fluid Mechanics I (3)
Registration Restriction(s): Aerospace, biomedical, mechanical, or biosystems engineering major.
345 Aerospace Engineering Instrumentation and Measurement (3)
Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.
351 Compressible Flow (3)
Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.
363 Structural Analysis of Aerospace Vehicles (3)
Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.

370 Airplane Performance (4)
Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.

## 422 Aerodynamics (3)

Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.

## 424 Astronautics (4)

Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.

## 425 Propulsion (4)

Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.

## 426 Introduction to Aerospace Design (2)

Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.
429 Aerospace System Design (3)
Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.

## REVISE REGISTRATION RESTRICTION

## *410 Professional Topics (2)

Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major. Minimum student level - senior.
Formerly: Registration Restriction(s): Minimum student level - senior.

## REVISE (DE) PREREQUISITE, ADD REGISTRATION RESTRICTION

* 449 Aerospace Engineering Laboratory (3)
(DE) Prerequisite(s): 425; English 102 or 118.
Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major. Formerly: (DE) Prerequisite(s): 425.


## (192) (BME) Biomedical Engineering

## † ADD (PRIMARY CROSS-LIST)

315 Signals Analysis (3) Continuous- and discrete-time functions, Laplace transforms, convolution, sampling theory, continuousand discrete-time Fourier series, continuous- and discrete-time Fourier transforms, z transforms and system identification in the time and frequency domain. (Same as Mechanical Engineering 315.)
(RE) Prerequisite(s): 363 or Mechanical Engineering 363.

## ADD

480 Computational Cell Biology (3) Introduction to dynamical modeling in molecular and cellular biology. Topics include models and analysis of neurons and other excitable systems, fast and slow time scales, whole-cell models, intercellular communication, cell cycle controls, molecular motors, and stochastic and nonlinear dynamics in biological systems.
(RE) Prerequisite(s): Mathematics 231 and 241.
Recommended Background: MATLAB or other programming language.

ADD REGISTRATION RESTRICTION
345 Biomedical Engineering Instrumentation and Measurement (3)
Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.

## 363 System Dynamics (3)

Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.
455 Biomedical Engineering Design I (2)
Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.

## 469 Biomedical Engineering Design II (3)

Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.

## 473 Applied Biomechanics (3)

Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.

## REVISE (RE) PREREQUISITE, ADD (DE) PREREQUISITE, ADD REGISTRATION RESTRICTION

*430 Biomedical Engineering Laboratory (3)
(RE) Prerequisite(s): 315 or Electrical and Computer Engineering 315, 345.
(DE) Prerequisite(s): English 102 or 118.
Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major.
Formerly: (RE) Prerequisite(s): 345 and Electrical and Computer Engineering 315.

## REVISE REGISTRATION RESTRICTION

## *410 Professional Topics (2)

Registration Restriction(s): Aerospace engineering major or biomedical engineering major or mechanical engineering major. Minimum student level - senior.
Formerly: Registration Restriction(s): Minimum student level - senior.

## (650) (ME) Mechanical Engineering

ADD
470 Computer Aided Design (3) Introduction to the fundamental concepts of computer aided design (CAD) and commercially available software.
(RE) Prerequisite(s): 231 and 321.
476 Fuel Cell Engines (3) Introduction to fundamentals of fuel cells with an emphasis on polymer electrolyte fuel cells. Includes fundamentals of electrochemistry, thermodynamics, fluid mechanics, heat transfer, materials, and manufacturing issues of PEFCs. A brief survey of other fuel cell types is also included.
(RE) Prerequisite(s): 331 and Aerospace Engineering 341.

ADD (SECONDARY CROSS-LIST)
† 315 Signals Analysis (3) (See Biomedical Engineering 315.)

REVISE (DE) PREREQUISITE, DROP (RE) COREQUISITE

## *449 Mechanical Engineering Laboratory (3)

(DE) Prerequisite(s): 321 and English 102 or 118.
Formerly:
(DE) Prerequisite(s): 321.
(RE) Corequisite(s): 475.

DROP (RE) COREQUISITE, ADD (RE) PREREQUISITE

## ME 480 Introduction to Hybrid Electric Vehicles (3)

(RE) Prerequisite(s): 331.
Formerly: (RE) Corequisite(s): 475.

## DEPARTMENT OF NUCLEAR ENGINEERING

## (716) (NE) Nuclear Engineering

ADD
362 Numerical Methods and Fortran (3) Numerical methods of differentiating, integrating and interpolating functions using the Fortran programming language applied to nuclear engineering problems involving spherical harmonics, Legendre polynomials, Bessel and Neumann functions, eigenvalue problems, and ordinary and partial differential equations. (RE) Prerequisite(s): Mathematics 241 or 247; Mathematics 231.
Registration Restriction(s): Nuclear engineering major.

440 Introduction to Nuclear Fuels \& Materials (3) Introduction to nuclear fuels and materials in light water reactors, with a focus on the effect of irradiation on properties and performance.
(DE) Prerequisite(s): Mechanical Engineering 331.
(DE) Corequisite(s): Materials Science and Engineering 201 and Mechanical Engineering 321.
441 Corrosion in Nuclear Power Systems (3) Introduction to materials degradation due to aqueous corrosion of the materials in nuclear power plants.
(DE) Prerequisite(s): Mechanical Engineering 331 and Materials Science and Engineering 201.

## REVISE DESCRIPTION, REVISE CREDIT HOURS

470 Nuclear Reactor Theory I (3) Fundamentals of reactor physics relative to cross sections kinematics of elastic scattering, reactor kinetics, reactor systems, and nuclear data. Analytical and numerical methods applicable to general criticality problems, eigenvalue searches, perturbation theory, and the multigroup diffusion equations.
Formerly: (4) Fundamentals of reactor physics relative to cross sections. Kinematics of elastic scattering. Reactor kinetics, reactor systems, and nuclear data. Analytical and numerical methods applicable to general criticality problems, eigenvalue searches, perturbation theory, and the multigroup diffusion equations, and introduction to Fortran programming.

## II. PROGRAM CHANGES

## REVISE COLLEGE TEXT (ADMISSION)

## College Admission Requirements

The College of Engineering has established admissions criteria for incoming freshmen based on several performance criteria, including completion of core academic subjects, GPA scores on these subjects and standardized test (SAT or ACT) scores. A Success Prediction Indicator (SPI) number of 60 and a math ACT of 25 or a math SAT of 620 are minimum standards used for admission to the College of Engineering. The admitted class may also be limited by space available in the College. In addition to these requirements, a Success Prediction Indicator (SPI) number is used for admission to the College of Engineering. The SPI is calculated by adding an individual's ACT mathematics score to 10 times their core high school GPA (based on a 4.0 scale). For information on what constitutes core high school courses, please consult admission website http://admissions.utk.edu/undergraduate/apply/requirements.shtml.

The following table indicates the minimum required SPI for the corresponding academic year:

SPI EXAMPLE: A student with a high school core GPA of 3.5 and an ACT mathematics score of 28 would have an SPI of 63 using the formula $(3.5 \times 10)+28=63$. SAT scores are converted to an equivalent ACT score to perform this calculation.

Students who wish to pursue a degree in the College of Engineering at the University of Tennessee, Knoxville, but do not meet the college admission SP1 criterion may enroll as University Undecided students and complete appropriate mathematics, science, and other courses before applying again for admission to the College of Engineering.

Rationale: The revised admission policy helps clarify math requirements and allows College of Engineering to recruit a more diverse group of students. Impact on other units: None. Financial impact: None.

## First-Year Courses for Honors Concentrations

(For Computer Science, see listing in Department of Electrical Engineering and Computer Science section)
Beginning students who wish to pursue an honors concentration in one of the engineering majors will normally be part of the Chancellor's Honors Program or the Haslam Scholars Program. Requirements for first-year coursework are: Requirements for firstyear course work duplicate those of the Chancellor's Honors Program. Course work requirements in the upper division are specific to the individual departments and the student is referred to those individual descriptions for explanation.
Specifically, first year requirements are:

- ENGL 118-Honors: English Composition, under the same conditions as stated in the requirements for the Chancellor's Honors Program.
- UNHO-100-Chancellor's Honors First-Year Seminar.
- One 200-level University Honors seminar to be completed during the second semester of the freshman year.
- Four additional 100- or 200-level departmental honors courses. For engineering students, these would normally be EF 157 - Honors: Physics for Engineers I, EF 158 - Honors: Physics for Engineers II, and two courses chosen from MATH 147, MATH 148, MATH 247 or CHEM 128, CHEM 138.
- The combination of a UH 100 - Chancellor's Honors First-Year Seminar AND a UH 200 level course may be used as an approved substitute for a single 200-level departmental honors course.
- Other departmental honors courses may be approved by the individual engineering departments upon entry to their honors concentration.
- Coursework requirements in the upper division are specific to the individual departments and the student is referred to those individual descriptions for explanation.
Other courses may be approved by the individual engineering department upon entry to their honors concentration.


## ADD COLLEGE TEXT (ADD PARAGRAPH TO END OF COLLEGE TEXT)

## Five-Year Minor/MS Program

## Five-Year BS with Physics Minor-MS Program

Qualified students completing a BS degree from a department of the College of Engineering or the College of Arts and Sciences may add a physics minor by completing the requirements listed below. Six hours of 400 -level courses required for a minor in physics combined with a BS engineering degree may be applied toward a master's degree (project option or non-thesis option) in physics during a fifth year following the award of the BS. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for an undergraduate program. Significant components of the program are:

- Students must have an overall GPA of 3.4 in required course work. Conditional admission may be granted after completing the required 100-and 200-level requirements for the minor while full admission is granted after enrolling in the final semester of courses required for all BS and minor course requirements with a minimum overall GPA of 3.4.
- Students must at least be conditionally admitted to the program prior to taking graduate courses for both their minor and master's degree. All courses taken for graduate credit must be approved by the graduate program director. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit.
- Students admitted to the program must also follow the normal procedure for admission to the Graduate School. Admission of students into this program must be approved by the department and the Graduate School. Students will not be eligible for assistantships until they are enrolled as graduate-level students in the Graduate School.


## REVISE ENGINEERING ENTREPRENEURSHIP MINOR

## Minor Requirements

The minor consists of 17-20 hours.

## Complete:

- EF 130 - Survey of Engineering Entrepreneurship
- EF 400-Technology Commercialization
- IE 405 - Engineering Economic Analysis
- ME 457 - Engineering Entrepreneurship


## Select two courses:

- ENGL 360-Technical and Professional Writing*
- CMST 312 - Survey of Interpersonal Communication or
- CMST 442-Organizational Communication Processes
- PHIL 244 - Professional Responsibility*
- PHIL 241 - Engineering Ethics-or
- PHIL 243-Business Ethics


## Select one course:

- AE 429 - Aerospace System Design
- BSE 402 - Biosystems Engineering Design II
- BME 469 - Biomedical Engineering Design II
- CBE 480 - Equipment Design and Economic Methods
- CBE 488 - Honors: Design Internship in Green Engineering*
- CBE 490 - Process Design and Economic Analysis*
- CE 400 - Senior Design Project
- COSC 400 - Senior Design
- ECE 400 - Senior Design*
- IE 422 - Senior Problems Analysis*
- ME 460 - Mechanical Engineering Design II
- MSE 489 - Materials Design*
- NE 472 - Nuclear System Design
* Meets University General Education requirement.

Note:
Capstone of the "E-Ship" Minor is the creation of a fundable proposal based on student generated technologies from senior design studies or technologies available from area sources (UT, ORNL, others). Some of the coursework could also be used to satisfy general education and technical electives for undergraduate degree programs subject to the approval of the student's department.

## REVISE HONORS ENGINEERING LEADERSHIP MINOR

## Minor Requirements

The minor requires $\mathbf{1 8}$ hours plus non-credit capstone service and leadership activities.

## Complete:

- EF 337 - Honors Leadership Skills
- EF 357 - Honors Introduction to Entrepreneurship


## Select one course:

- UNHO 267 - Special Topics in the Social Sciences (Service Learning)
- UNHO 347 - Honors: Concentration in the Social Sciences (Service Learning)


## Select three courses:

- CMST 442 - Organizational Communication Processes
- MGT 451 - New Venture Planning
- MGT 460 - Leading Innovation and Change
- PHIL 244 - Professional Responsibility
- PHIL 241 - Engineering Ethics
- PSYC 440-Organizational Psychology


## College Leadership Capstone:

Students in this minor are expected to demonstrate leadership by assuming leadership positions in the College and University. This requirement has two parts and completion must be certified by the minor advisor:

1. Contribute service to the College or University through holding a selected or elected leadership position. Examples of acceptable positions are College Ambassador, Co-op Ambassador, Officer of Student Technical Society, Orientation Leader, Resident Assistant for Engage residential community, or other positions approved by minor advisor.
2. Demonstrate technical project leadership, normally by (a) serving as team leader for senior design or other departmental project course, or (b) competing in the College of Business' Business Plan competition to commercialize a new product. The minor advisor could approve other experiences for this requirement.

## DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING

## REVISE CHEMICAL ENGINEERING MAJOR

| Third Year | Hours Credit |
| :--- | :---: |
| CBE 301, 310*(WC), 340, 360, 380 | 3 |
| CHEM 350 | 3 |
| ${ }^{1}$ General Education Electives (Arts and Humanities) |  |
| PHYS 231 | 63 |
| PHH2 242* (AH)(OC) or PHHL 244* (AH)(OC) | 3 |
| ${ }^{12}$ Chem Option! | 3 |


| ${ }^{3}$ Bio Option I | 3 |
| :---: | :---: |
| ${ }^{34}$ Technical Elective | 3 |
| Fourth Year |  |
| CBE 401, 445, 450, 480, 488*(OC) or 490*(OC) | 13 |
| General Education Electives (Cultures and Civilizations, Social Science)* | 9 |
| ${ }^{34}$ Technical Electives | 5 |
| *Meets the University General Education Requirement. |  |
| ${ }^{1}$ Students who may already have credit for a Communicating Orally (OC) course may select any |  |
| course with an (AH) designation from the university general education list. |  |
| courses; Environmental Engineering 554, 562; MSE 340, MSE 360, MSE 470; any 200-level or above MICR courses. |  |
| ${ }^{23}$ Bio Option I: BCMB 230, BCMB 310, BCMB 321, BCMB 401, BCMB 402; BIOL 240, BIOL |  |
| 250; MICR 210, MICR 310. |  |
| ${ }^{34}$ One technical elective must be a Chemical and Biomolecular Engineering choosing the bio-track must take-CBE 475-as one technical elective. | dents |

## REVISE CHEMICAL ENGINEERING MAJOR—HONORS CONCENTRATION

The honors concentration encourages highly motivated students to experience a more rigorous preparation in the Department of Chemical and Biomolecular Engineering. Admission is selective, and students will normally be participating in the Chancellor's Honors Program as well. application to the honors concentration is made when the student applies for upper-division status.

Candidates for the honors chemical engineering concentration and the honors biomolecular engineering concentration must complete the following requirements:
o First-year courses for honors concentration in the engineering majors.
o Further requirements for the honors chemical engineering concentration and the honors biomolecular engineering concentration are as follows. Maintain an overall GPA of at least 3.3 and a GPA of at least 3.3 in departmental courses. Complete MATH 247; CHEM 483; CBE 407, CBE 447, and one of the following: CBE 467, CBE 488, CBE 498. Complete a 3 -hour honors senior design course. This requirement is satisfied by CBE 488.

REVISE CHEMICAL ENGINEERING MAJOR-BIOMOLECULAR ENGINEERING CONCENTRATION

| Third Year | Hours Credit |
| :---: | :---: |
| CBE 301, 310*(WC), 340, 360, 380 | 13 |
| CHEM 350, 360, 369 | 7 |
| ${ }^{1}$ General Education Electives (Arts and Humanities)* | 63 |
| PHYS 231* | 3 |
| BIOL 240 | 4 |
| PHIL 242* (AH)(OC) or PHIL 244* (AH)(OC) | 3 |
| Fourth Year |  |
| CBE 401, 445, 450, 475, 480, 488*(OC) or 490*(OC) | 16 |
| ${ }^{12}$ Bio Option I | 3 |
| General Education Electives (Cultures and Civilizations, Social Science)* | 9 |
| BCMB 401 or BCMB 412 | 4 |
| *Meets the University General Education Requirement. |  |
| ${ }^{7}$ Students who may already have credit for a Communicating Orally (OC) course may select any |  |
| course with an (AH) designation from the university general education list ${ }^{12}$ BCMB 230, BCMB 310, BCMB 321, BCMB 412; BIOL 250; MICR 210, |  |

## REVISE CHEMICAL ENGINEERING MAJOR-HONORS BIOMOLECULAR ENGINEERING CONCENTRATION

The honors concentration encourages highly motivated students to experience a more rigorous preparation in the Department of Chemical and Biomolecular Engineering. Admission is selective, and students will normally be participating in the Chancellor's Honors Program as well. application to the honors concentration is made when the student applies for upper-division status.

Candidates for the honors chemical engineering concentration and the honors biomolecular engineering concentration must complete the following requirements:
o First-year courses for honors concentration in the engineering majors.
o Further requirements for the honors chemical engineering concentration and the honors biomolecular engineering concentration are as follows. Maintain an overall GPA of at least 3.3 and a GPA of at least 3.3 in departmental courses. Complete MATH 247; CHEM 483; CBE 407, CBE 447, and one of the following: CBE 467, CBE 488, CBE 498. Complete a 3 -hour honors senior design course. This requirement is satisfied by CBE 488.

## DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

## REVISE ENVIRONMENTAL ENGINEERING MINOR

## Minor Requirements

The minor requires the completion of a minimum of 21 credits in coursework which builds the foundation of an environmental engineering perspective.

## Required Courses

Complete:

- CE 486 - Air and Waste Management
- GEOL 202 - Earth as an Ecosystem: Modern Problems and Solutions


## Select one course:

- GEOL 202 - Earth as an Ecosystem: Modern Problems and Solutions
- PHIL 245-Environmental Ethics


## Select one course:

- CBE 475 - Applied Microbiology and Bioengineering
- ENVE 513 - Environmental Microbiology


## Select one course:

- CHEM 230 - Inorganic Chemistry
- CHEM 310-Analytical Chemistry
- CHEM 350-Organic Chemistry I


## Select two courses:

- CBE 201 - Material and Energy Balances
- BSE 221 - Mass and Energy in Biosystems
- BSE 416 - Environmental Hydrology
- CE 381 - Environmental Engineering I
- CE 494 - Water Resources Engineering II


## Select one course:

- GEOL 485 - Principles of Hydrogeology
- CE 485 - Principles of Hydrogeology
- ESS 444 - Environmental Soil Physics


## DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

## REVISE DEPARTMENT TEXT (PROGRAM OUTCOMES)

## Program-Outcomes

In addition to the eleven program outcomes listed in the College of Engineering section on National Accreditation, outcomes also include knowledge of probability and statistics including applications, discrete math, and an understanding of advanced mathematics in the areas of differential equations, numerical analysis, linear algebra, and calculus. The computer engineering and electrical engineering programs are under continuous assessment and improvement based on Engineering Criteria 2000. The advisory committee to the department, which is made up of persons from industry, government, higher education students, recent graduates, and faculty, provides constituent input for setting program educational objectives and outcomes and establishing the requisite assessment modes for the program.

## Student Outcomes for Computer Engineering and Electrical Engineering Majors

The computer engineering and electrical engineering programs enable students to achieve, by the time of graduation:
a. an ability to apply knowledge of mathematics, science, and engineering.
b. an ability to design and conduct experiments, as well as to analyze and interpret data.
c. an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
d. an ability to function on multidisciplinary teams.
e. an ability to identify, formulate, and solve engineering problems.
f. an understanding of professional and ethical responsibility.
g. an ability to communicate effectively.
h. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
i. a recognition of the need for, and an ability to engage in life-long learning.
a knowledge of contemporary issues.
k. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice. knowledge of probability and statistics including applications, discrete math, and an understanding of advanced mathematics in the areas of differential equations, numerical analysis, linear algebra, and calculus.
The computer engineering and electrical engineering programs are under continuous assessment and improvement based on ABET's Criteria for Accrediting Engineering Programs. The advisory committee to the department, which is made up of persons from industry, government, higher education students, recent graduates, and faculty, provides constituent input for setting program educational objectives and outcomes and establishing the requisite assessment modes for the program.

## Student Outcomes for Computer Science Majors

The computer science program enables students to achieve, by the time of graduation:
a. an ability to apply knowledge of computing and mathematics appropriate to the discipline.
b. an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
c. an ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
d. an ability to function effectively on teams to accomplish a common goal.
e. an understanding of professional, ethical, legal, security and social issues and responsibilities.
f. an ability to communicate effectively with a range of audiences.
g. an ability to analyze the local and global impact of computing on individuals, organizations, and society.
h. recognition of the need for and an ability to engage in continuing professional development. an ability to use current techniques, skills, and tools necessary for computing practice. an ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
k. an ability to apply design and development principles in the construction of software systems of varying complexity. The computer science program is under continuous assessment and improvement based on ABET's Criteria for Accrediting Computing Programs. The advisory committee to the department, which is made up of persons from industry, government, higher education students, recent graduates, and faculty, provides constituent input for setting program educational objectives and outcomes and establishing the requisite assessment modes for the program.

## REVISE COMPUTER SCIENCE MAJOR

| Second Year | Hours Credit |
| :---: | :---: |
| COSC 160, COSC 302, COSC 311, COSC 312 | 1411 |
| MATH 241 or MATH 247, MATH 251 or MATH 257, MATH 300 or MATH 307 | 710 |
| BIOL 101 or BIOL 130 or CHEM 100 or CHEM 120 or PHYS 231 | 3-4 |
| ${ }^{1}$ Arts and Humanities Elective* PHIL 241*, PHIL 242*, PHIL 243*, or PHIL 244* | 3 |
| ${ }^{1}$ Communicating Orally Oral Communications Elective* | 3 |
| Third Year |  |
| COSC 360, COSC 361, COSC 365,-COSC 380 | 1011 |
| ECE 313 COSC 340 or COSC 370 or MATH 371 | 3-4 |
| MATH 323 or ECE 313 | 3 |
| ${ }^{32}$ Computer Science Upper Division Electives or MATH 231 | 63 |
| ${ }^{1}$ Cultures and Civilizations Electives* | 6 |
| ${ }^{1}$ Social Sciences Elective* | 3 |
| ${ }^{23}$ General Elective | 37 |
| Fourth Year |  |
| COSC 400 | 5 |
| ${ }^{32}$ Computer Science Upper Division Electives | 15 |
| ENGL 355* or ENGL 360* | 3 |
| ${ }^{1}$ Arts and Humanities Elective* | 3 |
| ${ }^{1}$ Social Science Elective* | 3 |
| TOTAL | 120-123 |
|  | 120-124 |
| *Meets University General Education Requirements |  |
| ${ }^{1}$ Can be taken any time. |  |
| ${ }^{2}$ Any 300-400-level computer science-courses not already required by the major or Math 231. <br> ${ }^{23}$ Any courses not already required for the major. Must be approved by advisor. |  |
| ${ }^{3}$ The following table lists the acceptable set of electives that may be taken to satis division electives for the CS major. The electives have been grouped into 6 sugge | the upper ted tracks. |


| The tracks group related electives that a student may wish to take in order to achieve a level of expertise in the indicated area. However, it is not mandatory to take any track and students are free to mix and match courses from different tracks to fit their specific interests. |  |
| :---: | :---: |
| Theory | Systems |
| COSC 440 - Formal Foundations of Software | COSC 456 - Computer Graphics |
| Engineering |  |
| COSC 482 - Theory of Computation | COSC 462 - Parallel Programming |
|  | ECE 453 - Intro to Computer Networks |
|  | ECE 454 - Computer \& Network Security |
| Software | Hardware |
| COSC 340 - Software Engineering | ECE 451 - Computer Systems Architecture |
| COSC 461 - Compilers | ECE 455 - Embedded Systems Design |
| COSC 465 - Database \& Scripting Languages |  |
| Scientific Computing | Artificial Intelligence |
| COSC 370 - Intro to Scientific Computing | COSC 420 - Biologically Inspired Computing |
| COSC 471 - Numerical Analysis | COSC 425 - Machine Learning |
| COSC 472 - Numerical Algebra | ECE 471 - Intro to Pattern Recognition |
| MATH 231 - Differential Equations I |  |

REVISE COMPUTER ENGINEERING MAJOR

| Third Year | Hours Credit |
| :---: | :---: |
| ECE 315, ECE 335 | 7 |
| COSC 302, COSC 360 | 8 |
| MATH 300 or MATH 307 | 3 |
| ECE 316, ECE 342, ECE 355, ECE 395 | 10 |
| ${ }^{2}$ Arts and Humanities Elective* PHHL 241*, PHHL 243*, or PHIL 244* | 3 |
| ${ }^{2}$ Cultures and Civilizations Electives* | 6 |
| Fourth Year |  |
| ECE 451 | 3 |
| ECE 453 or ECE 454 or ECE 455 ECE 451-ECE 453 or ECE 451 - ECE 455 | 36 |
| ECE 400* | 5 |
| ${ }^{3}$ Computer Engineering Senior Electives | 6 |
| ${ }^{2}$ Arts and Humanities Elective* | 3 |
| ${ }^{2}$ Social Science Electives* | 6 |
| ${ }^{1}$ EF 402 | 1 |

REVISE ELECTRICAL ENGINEERING MAJOR

## Second Year

## Hours Credit

MATH 200, MATH 231, MATH $241 \quad 8$
PHYS 231*, PHYS 232* 7
ECE 255, ECE 313 7 7
ECE 300 5
${ }^{2}$ Arts and Humanities Elective* PHIL 241*, PHIL 243*, or PHIL 244* 3

[^11]
## ENGINEERING PHYSICS PROGRAM

DROP DEPARTMENT HEADING AND ALL ASSOCIATED TEXT
DROP ENGINEERING PHYSICS MAJOR
DROP ENGINEERING PHYSICS MAJOR—HONORS CONCENTRATION

## DEPARTMENT OF INDUSTRIAL AND INFORMATION ENGINEERING

## REVISE DEPARTMENT TEXT (OBJECTIVES)

## Objectives

The program educational objectives of the industrial engineering program are to prepare our graduates to:

- Objective 1: Our graduates will be able to think critically and to take a systems approach. They will be able to use modern tools of industrial engineering practice to collect, analyze, and use data in the design, evaluation, operation, and improvement of value-adding processes in for-profit organizations (e.g. manufacturing and service) and not-for-profit (e.g. government, healthcare, and education). They will possess the tools and insights necessary to attack unstructured, complex, and multi-dimensioned problems with a methodology that leads to practical, realistic, and implementable solutions.
- Objective 2: Our graduates will be innovative thinkers, able to challenge tradition and create new ideas. Their approach to problem-solving and process improvement will be unfettered by status quo paradigms and will be champions for thinking outside-the-box - agents of change for their respective organizations. Our graduates will have strong interpersonal and teaming skills that will enable them to effectively lead problem-solving and quality improvement teams and build consensus in the development of new and better practices.
- Objective 3: Our graduates will be continual learners, and have respect for the uniqueness of each problem encountered and an appreciation for the academic obsolescence brought on by changes in the environment in which they work (e.g. technology, economy, societal values. They will be able to recognize the shortcomings of their education and experience and be willing and able to acquire new knowledge as necessary to keep abreast of the dynamics of the workplace and the IE discipline.
- Objective 4: Our graduates will be good communicators, and will be able to encourage and respect the opinions of others, even when such opinions constitute contrarian views. IE graduates will have good skills in listening, interviewing, presenting, report and letter writing, and an appreciation for the importance of empathy, succinctness, and clarity in the effective exchange of ideas.

The educational objectives of the Industrial Engineering program are to prepare our students to:

- have successful professional careers that employ industrial and systems engineering concepts and principles,
- pursue life-long learning,
- and achieve positions of leadership.

This curriculum emphasizes the knowledge and skills necessary to design integrated systems of people, materials, equipment, and energy such that the overall systems function at an optimal level and such that the needs of human components of the system are met. The solid, broad base in engineering, combined with education in applying engineering methodology to traditionally nonengineering problem areas as provided through the industrial engineering curriculum, leads to participation by industrial engineers in an unlimited range of fields including retail distribution, banking, health care delivery, corporate management, municipal management, food industry, as well as traditional areas of manufacturing.

## REVISE INDUSTRIAL ENGINEERING MAJOR

| Second Year | Hours Credit |
| :---: | :---: |
| AGCT 200-or AGGT 207 | 3 |
| STAT 251 | 3 |
| MATH 200, MATH 231, MATH 241 or MATH 247 | 8 |
| PHYS 231* | 3 |
| EF 230 | 2 |
| IE 200, IE 202, IE 250, IE 405 | 104 |
| MSE 201 | 3 |
| ME 331 ME 231 | 3 |
| ECON 201* or ECON 207* | 4 |
| Third Year |  |
| AE 331 | 3 |
| ECE 301 | 3 |
| IE 300, IE 301, IE 304, IE 405 IE 310, IE 340, IE 350* | 1612 |
| IE 401, IE 402, IE 421 IE 310, IE 330, IE 340, IE 350* | 910 |
| PHIL 244* ${ }^{2}$ Arts and Humanities Elective | 3 |
| Fourth Year |  |
| IE 401, IE 402, IE 404, IE 406, IE 422*, IE 427, IE 450 | 1110 |
| IE 421, IE 422, IE 427, IE 450 | 10 |
| ${ }^{32}$ IE Technical Electives | 123 |
| ${ }^{43}$ Cultures and Civilizations Elective* | 6 |
| ${ }^{54}$ Arts and Humanities Elective* | 3 |

[^12][^13]
## DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

## ADD DEPARTMENT TEXT (FIVE YEAR BS-MS PROGRAM)

## Five-Year BS/MS Program

The department offers a 5-year BS-MS program with a BS (major in materials science and engineering) and an MS (major in materials science and engineering or polymer engineering) for qualified students. The primary component of the program is that qualified students may take up to 9 hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor's and master's degrees at the University of Tennessee. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the Bachelor of Science degree. Significant components of the program are:

- $\quad$ Students must have an overall GPA of 3.4 in required course work. Conditional admission to the 5-year program may be granted after completion of 65 hours of required course work, while full admission may be granted after the completion of 96 hours of required course work with a minimum overall GPA of 3.4.
- Students must at least be conditionally admitted to the program prior to taking graduate courses for both their bachelor's and master's degrees. All courses taken for graduate credit must be approved by the graduate program director. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit.
- Students admitted to the program must also follow the normal procedure for admission to the Graduate School. Admission of students into this program must be approved by the department and the Graduate School. Students will not be eligible for assistantships until they are enrolled as graduate-level students in the Graduate School.


## $\diamond$ ADD FIVE YEAR BS-MS PROGRAM—MATERIALS SCIENCE AND ENGINEERING (AFTER MSE SHOWCASE)

## Five-Year BS/MS Program

The department offers a 5 -year BS-MS program with a BS (major in materials science and engineering) and an MS (major in materials science and engineering or polymer engineering) for qualified students. The primary component of the program is that qualified students may take up to 9 hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor's and master's degrees at the University of Tennessee. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the Bachelor of Science degree. Significant components of the program are:

- Students must have an overall GPA of 3.4 in required course work. Conditional admission to the 5 -year program may be granted after completion of 65 hours of required course work, while full admission may be granted after the completion of 96 hours of required course work with a minimum overall GPA of 3.4.
- Students must at least be conditionally admitted to the program prior to taking graduate courses for both their bachelor's and master's degrees. All courses taken for graduate credit must be approved by the graduate program director. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit.
- Students admitted to the program must also follow the normal procedure for admission to the Graduate School. Admission of students into this program must be approved by the department and the Graduate School. Students will not be eligible for assistantships until they are enrolled as graduate-level students in the Graduate School.


## REVISE MATERIALS SCIENCE AND ENGINEERING MAJOR

Second Year<br>MSE 201, MSE 210, MSE 250, MSE 260, MSE 290,-MSE 291<br>PHYS 231*, PHYS 232*<br>Hours Credit<br>11<br>MATH 200, MATH 231, MATH 241 or MATH 247<br>7<br>- 8<br>${ }^{2}$ General Education Elective (Social Science) 6<br>${ }^{3}$ Technical electives: BCMB 230; BIOL 140; BME 300, BME 409; CBE 475; CHEM 350; any MSE

course (except MSE 220); ME 321; NE 483, NE 484.

REVISE MATERIALS SCIENCE AND ENGINEERING MAJOR—BIOMATERIALS CONCENTRATION

## Second Year

MSE 201, MSE 210, MSE 250, MSE 260, MSE 290, MSE 291
PHYS 231*, PHYS 232*
MATH 200, MATH 231, MATH 241 or MATH 247
${ }^{2}$ General Education Elective (Social Science)

Concentration Coursework
MSE 474
MSE 485 or MSE 486 (or equivalents MSE 578, MSE 588)
BIOL 140 or BCMB 230
Select one: MSE 470, MSE 485, MSE 486; BME 409; BSE 231; CBE 475

## Hours Credit

11
7
8
6334-5
${ }^{3}$ Technical electives: BCMB 230; BIOL 140; BME 300, BME 409; CBE 475; CHEM 350; any MSE course (except MSE 220); ME 321; NE 483, NE 484.

## REVISE MATERIALS SCIENCE AND ENGINEERING MAJOR—NANOMATERIALS CONCENTRATION

Second Year
MSE 201, MSE 210, MSE 250, MSE 260, MSE 290, MSE 291
PHYS 231*, PHYS 232*
Hours Credit

MATH 200, MATH 231, MATH 241 or MATH 247
11
${ }^{2}$ General Education Elective (Social Science)
${ }^{3}$ Technical electives: BCMB 230; BIOL 140; BME 300, BME 409; CBE 475; CHEM 350; any MSE course (except MSE 220); ME 321; NE 483, NE 484.

## REVISE MATERIALS SCIENCE AND ENGINEERING MINOR

## Minor Requirements

The minor consists of 1218 credit hours of MSE coursework.

## Complete:

- MSE 201 - Introduction to Materials Science and Engineering
- MSE 480 - Materials Selection in Design


## Select at least one course:

- MSE 320-Diffusion and Phase-Transformations
- MSE 340 - Principles of Polymeric Materials
- MSE 350 - Principles of Electronic, Optical, and Magnetic Materials
- MSE 360 - Principles of Ceramic Materials
- MSE 390 - Principles of Metallic Materials
- MSE 410-Theory and Processing of Conventional and Nano-structured Devices


## Select one course:

- any 300-level or 400-level MSE course

Select at least three courses (one must be 400 -level):

- any 300-400-level MSE courses
- BME 455-Biomedical Engineering Design 1
- BME 469-Biomedical Engineering-Design H
- BME 473-Applied Biomechanics
- CHEM 350- Organic Chemistry 1
- GHEM360-Organic Chemistry H
- GHEM369-Organic Chemistry Laboratory
- GHEM 430-Advanced Inorganic Chemistry
- CHEM 439 - Advanced Inorganic Chemistry Laboratory
- CHEM 450 - Advanced Organic Chemistry
- GHEM 473 - Physical Chemistry 1
- GHEM 479-Physical Chemistry Laboratory
- GHEM-483-Physical-Chemistry H
- CHEM 489 - Physical Chemistry Laboratory II
- CHEM 490 - Introductory Polymer Chemistry
- CBE 301 - Application of Statistical and Numerical Techniques in Engineering
- GBE 447-Honors: Transport Phenomena
- GBE 484-Introduction to Maintainability Engineering
- CE 321-Materials of Construction
- ECE 335-Electronic Devices
- IE 330-Manufacturing Materials/Processes
- IE 401-Integrated Manufacturing Systems
- IE 484-Introduction to Maintenance Engineering
- ME 321-Mechanics of Materials
- ME 366-Manufacturing Processes
- ME 466-Elements of Machine Design II
- ME 484 - Introduction to Maintainability Engineering
- NE 484-Introduction to Maintainability Engineering
- PHYS 342-Structure of Matter
- PHYS-411 - Introduction to Quantum Mechanics
- PHYS 412 - Introduction to Quantum Mechanics
- PHYS 421 - Modern Optics
- PHYS 431 - Electricity and Magnetism
- PHYS 432-Electricity and Magnetism
- other courses approved in advance by MSE department


## DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING

## REVISE PROGRAM TEXT (AEROSPACE ENGINEERING)

The educational objectives of the aerospace engineering program are

- To provide students with a comprehensive an education that includes in-depth fundamental instruction in aerodynamics, structures, flight mechanics, orbital mechanics, flight propulsion and the design of aerospace systems.
- To prepare students for professional careers in aerospace engineering by developing the skills pertinent to problem solving, analysis, design and those personal skills required for teamwork and effective communication.
- To provide opportunities to develop-and cultivate lifelong learning skills, individual professionalism and ethics.
- To prepare capable some students for graduate study at major universities limited by student desire and their mental ability and agility.

REVISE AEROSPACE ENGINEERING MAJOR

| Third Year | Hours Credit |
| :--- | :---: |
| AE 341, AE 345, AE 351, AE 363, AE 370 | 16 |
| ME 331, ME 344, ME 363 | 9 |
| ECE 301 | 3 |
| ME 391 | 3 |
| ${ }^{2}$ Arts and Humanities Elective* PHIL 241* | 3 |

## REVISE PROGRAM TEXT (BIOMEDICAL ENGINEERING)

The educational objectives of the biomedical engineering program are

- In their professional work or graduate study, program graduates will have demonstrated an in-depth understanding of biology and physiology, advanced mathematics (including differential equations and statistics), and problems associated with the interaction between living and non-living materials and systems.
- In their professional work or graduate study, program graduates will have demonstrated skills for problem solving at the interface of engineering and biology. Graduates will have demonstrated their competence in using modern experimental and data analysis techniques for measurements and data interpretation on living systems and biological materials, analysis and design of biomedical products. Graduates will have consistently demonstrated a high level of personal skills required for teamwork and effective communications.
- In their post-graduation professional activities graduates will have demonstrated a commitment to life-long learning and personal professionalism and ethics.
- Capable program graduates will have been able to gain admission to and successfully complete graduate study or the study of medicine at major universities.
- To provide students with a solid foundation in mathematics, the basic and engineering sciences, and engineering design methods.
- To provide students with a comprehensive integration of engineering methods of problem-solving and design with the biological sciences.
- To develop the skills needed for work in the medical device industry including a thorough coverage of engineering materials, biomaterials, biomechanics, medical device design, and work in interdisciplinary teams.
- To provide essential laboratory experience with commonly used biomedical devices and systems and to provide coverage of methods for the design of experiments in medical and life science applications.
- To provide a biomedical technology-based engineering background for students desiring admission to medical school with admission requirements being met through the appropriate selection of elective course work.

REVISE BIOMEDICAL ENGINEERING MAJOR

| Third Year | Hours Credit |
| :--- | :---: |
| ECE 300, ECE 315 | 58 |
| AE 341 | 3 |
| BME 315, BME 345, BME 363 | 96 |
| ME 331 | 3 |
| MSE 201 | 3 |
| ECON 201* or ECON 207* | 4 |
| ${ }^{2}$ Arts and Humanities Elective* PHIL 241* | 4 |

## REVISE PROGRAM TEXT (MECHANICAL ENGINEERING)

The educational objectives of the mechanical engineering program are

- To prepare students for professional careers by developing their skills in problem formulation, problem solving, analysis, computation, synthesis, teamwork and effective communication.
- To teach students the underlying principles of mechanical and thermal systems, and the application of these principles in the design process.
- To instill in students an appreciation for the importance of lifelong learning, individual professionalism and ethical practice.
- To prepare capable students for graduate study at major universities.
- To educate students thoroughly in methods of analysis, including mathematical and computational skills appropriate for application to engineering problems.
- To develop the skills pertinent to the design process, including skills needed for formulation of problems, analysis, synthesis, and skills pertinent to effective communication and collaborative work.
- To teach students to use modern experimental and data analysis techniques for engineering application.
- To prepare students for lifelong learning, nourish creative talents, and provide understanding of professional and ethical responsibilities.


## REVISE MECHANICAL ENGINEERING MAJOR

| Second Year | Hours Credit |
| :--- | :---: |
| MATH 231, MATH 241 or MATH 247, MATH 251 or MATH 257 | 10 |
| EF 230 | 2 |
| PHYS 231* | 3 |
| ME 231, ME 321 | 6 |
| MSE 201 | 3 |
| ECON 201* or ECON 207* | 4 |
| ${ }^{2}$ Cultures and Civilizations Elective* | 3 |
| ${ }^{2}$ Arts and Humanities Elective* PHIL 241* | 3 |

## DEPARTMENT OF NUCLEAR ENGINEERING

## ADD DEPARTMENT TEXT (FIVE YEAR BS-MS PROGRAM)

## Five-Year BSIMS Program

The department offers a 5-year BS-MS program with a BS (major in nuclear engineering) and an MS (major in nuclear engineering) for qualified students. The primary component of the program is that qualified students may take up to 6 hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor's and master's degrees at the University of Tennessee. This program is designed for students attending the University of Tennessee for their Master of Science
degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the Bachelor of Science degree. Significant components of the program are:

- Students must have an overall GPA of 3.4 in required course work. Conditional admission to the 5 -year program may be granted after completion of 63 hours of required course work, while full admission may be granted after the completion of 93 hours of required course work with a minimum overall GPA of 3.4.
- Students must at least be conditionally admitted to the program prior to taking graduate courses for both their bachelor's and master's degrees. All courses taken for graduate credit must be approved by the director of graduate studies. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit.
- Students admitted to the program must also follow the normal procedure for admission to the Graduate School. Admission of students into this program must be approved by the department and the Graduate School. Students will not be eligible for assistantships until they are enrolled as graduate-level students in the Graduate School.


## ADD FIVE YEAR BS-MS PROGRAM—NUCLEAR ENGINEERING (AFTER NUCLEAR ENGINEERING SHOWCASE)

## Five-Year BSIMS Program

The department offers a 5 -year BS-MS program with a BS (major in nuclear engineering) and an MS (major in nuclear engineering) for qualified students. The primary component of the program is that qualified students may take up to 6 hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor's and master's degrees at the University of Tennessee. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the Bachelor of Science degree. Significant components of the program are:

- Students must have an overall GPA of 3.4 in required course work. Conditional admission to the 5 -year program may be granted after completion of 63 hours of required course work, while full admission may be granted after the completion of 93 hours of required course work with a minimum overall GPA of 3.4.
- Students must at least be conditionally admitted to the program prior to taking graduate courses for both their bachelor's and master's degrees. All courses taken for graduate credit must be approved by the director of graduate studies. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit.
- Students admitted to the program must also follow the normal procedure for admission to the Graduate School. Admission of students into this program must be approved by the department and the Graduate School. Students will not be eligible for assistantships until they are enrolled as graduate-level students in the Graduate School.

REVISE NUCLEAR ENGINEERING MAJOR

| Third Year | Hours Credit |
| :---: | :---: |
| Cultures and Civilizations Elective* | 3 |
| MATH 403 | 3 |
| NE 342, NE 351, NE 360, NE 362, NE 401*, NE 433, NE 470 | 2119 |
| PHYS 341 | 3 |
| Social Sciences Elective* | 3 |
| Fourth Year |  |
| Cultures and Civilizations Elective* | 3 |
| EF 402 | 1 |
| MSE 201 | 3 |
| ME 321 | 3 |
| NE 400*, NE 402*, NE 406, NE 472 | 11 |
| ${ }^{2}$ Arts and Humanities Elective* PHHL 241*, PHIL 243*, or PHIL 244* | 3 |
| ${ }^{1}$ Technical Electives | 6 |
| TOTAL | 123124 |
| REVISE NUCLEAR ENGINEERING MAJOR-RADIOLOGICAL ENGINEERING CONCENTRATION |  |
| Third Year | Hours Credit |
| STAT 251 | 3 |
| Cultures and Civilizations Elective* | 3 |
| AAATH 403 | 3 |
| NE 342, NE 351, NE 362, NE 401*, NE 433, NE 470 | 1816 |
| PHYS 341 | 3 |
| Social Sciences Elective* | 3 |


| Fourth Year |  |
| :--- | :---: |
| Cultures and Civilizations Elective* |  |
| EF 402 |  |
| ME 321 | 1 |
| NE 400*, NE 402*, NE 406, NE 472, NE 490 | 3 |
| ${ }^{2}$ Arts and Humanities Elective* PHHL 241*, PHHL 243*, or PHIL 244* | 14 |
| ${ }^{1}$ Technical Electives | 3 |
|  | TOTAL |
|  | 123124 |

## COLLEGE OF NURSING

## All changes effective Fall 2011

## PART I. COURSE CHANGES

## (720) (NURS) Nursing

ADD
419 Nursing Care of Adults (4) Focus on maintenance and restoration of health for adults with commonly occurring acute, chronic, or complex health needs. Emphasis on critical indicators of underlying conditions, quality of care, and end of life care. Comparison of nursing needs of older adults to younger populations.
(RE) Prerequisites: 311, 319, 333, 351.
(RE) Corequisites: 420, 421, 471.
Registration Restriction: Bachelor of Science in Nursing - nursing major (accelerated track).
420 Adult Health Immersion (4) Clinical immersion experiences with a focus on maintenance and restoration of health for adults with commonly occurring acute, chronic, or complex health needs. Emphasis on critical indicators of underlying conditions, quality of care, and end of life care. Comparison of nursing needs of older adults to younger adult populations.
Contact Hour distribution: 4 clinical hours.
(RE) Prerequisites: 311, 319, 333, 351.
(RE) Corequisites: 419, 421, 471.
Registration Restriction: Bachelor of Science in Nursing - nursing major (accelerated track).

## REVISE REGISTRATION RESTRICTION, DROP COMMENT

## 305 Transitions to Professional Nursing (4)

Registration Restriction(s): Bachelor of Science in Nursing - nursing major (RN track).
Formerly:
Comment(s): For RNs only.
Registration Restriction(s): Bachelor of Science in Nursing - nursing major.

## 342 Transcultural Issues (2)

Registration Restriction(s): Bachelor of Science in Nursing - nursing major (accelerated track).
Formerly:
Comment(s): For non-nurse MSN students only.
Registration Restriction(s): Master of Science in Nursing - nursing major.
361 Health Maintenance and Restoration: Adult (5)
Registration Restriction(s): Bachelor of Science in Nursing - nursing major.
Formerly:
Comment(s): RNs are exempt from 311.
Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Master of Science in Nursing - nursing major.
415 Nursing the Childbearing Family (4)
Registration Restriction(s): Bachelor of Science in Nursing - nursing major (accelerated track).
Formerly:
Comment(s): For non-nurse MSN students only.
Registration Restriction(s): Master of Science in Nursing - nursing major.
432 Health Promotion and Maintenance Strategies in the Community (3)
Registration Restriction(s): Bachelor of Science in Nursing - nursing major (accelerated track).
Formerly:
Comment(s): For non-nurse MSN students only.
Registration Restriction(s): Master of Science in Nursing - nursing major
444 Care of Children, Adolescents, and Their Families (3)
Registration Restriction(s): Bachelor of Science in Nursing - nursing major (accelerated track).
Formerly:
Comment(s): For non-nurse MSN students only.
Registration Restriction(s): Master of Science in Nursing - nursing major.

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4 7 1 ~ N u r s i n g ~ R e s e a r c h ~ ( 3 )
Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Bachelor of Science in Nursing (RN track) or
Bachelor of Science in Nursing (accelerated track); minimum student level - senior.
Formerly:
Comment(s): Also open to RNs.
Registration Restriction(s): Bachelor of Science in Nursing - nursing major; minimum student level - senior.
```


## REVISE REGISTRATION RESTRICTION

311 Foundations of Professional Nursing Practice (5)
Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Bachelor of Science in Nursing -nursing major (accelerated track); minimum student level - junior.
Formerly: Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Master of Science in Nursing - nursing major; minimum student level - junior.

## 319 Pathophysiology of Health Deviations (4)

Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Bachelor of Science in Nursing - nursing major (RN track) or Bachelor of Science in Nursing -nursing major (accelerated track); minimum student level - junior.
Formerly: Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Master of Science in Nursing - nursing major; minimum student level - junior.

## 333 Health Assessment (3)

Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Bachelor of Science in Nursing (RN track) or Bachelor of Science in Nursing (accelerated track); minimum student level - junior.
Formerly: Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Master of Science in Nursing - nursing major; minimum student level - junior.

## 341 Transcultural Nursing (2)

Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Bachelor of Science in Nursing - nursing major (RN track); minimum student level - junior.
Formerly: Registration Restriction(s): Bachelor of Science in Nursing - nursing major; minimum student level - junior.

## 382 Health Promotion and Maintenance in the Community (5)

Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Bachelor of Science in Nursing - nursing major (RN track).
Formerly: Registration Restriction(s): Bachelor of Science in Nursing - nursing major.
421 Mental Health Maintenance and Restoration (5)
Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Bachelor of Science - nursing major (accelerated track).
Formerly: Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Master of Science - nursing major.

REVISE REGISTRATION RESTRICTION, DROP RECOMMENDED BACKGROUND

## * 454 Professional Leadership Issues (2)

Registration Restriction(s): Bachelor of Science in Nursing - nursing major (RN track) or Bachelor of Science in Nursing - nursing major (accelerated track).
Formerly:
Recommended Background: RN status or MSN.
Registration Restriction(s): Bachelor of Science in Nursing - nursing major or Master of Science in Nursing - nursing major.

REVISE REGISTRATION RESTRICTION, DROP (RE) PREREQUISITE

## * 494 Alternative Preceptorship (4)

Registration Restriction(s): Bachelor of Science in Nursing - nursing major (RN track).
Formerly:
(RE) Prerequisite(s): 305 and 471.
Registration Restriction(s): Bachelor of Science in Nursing - nursing major.

## PART II. PROGRAM CHANGES

REVISE NURSING MAJOR, BS IN NURSING
Second Year
EEB 240 (Anatomy) ..... 4
BCMB 230 (Physiology) ..... 5
MICR 210* ..... 3
NUTR 100* ..... 3
CFS 210* ..... 3
NURS 201 (Introduction to Nursing) ..... 2
Cultures and Civilizations* ..... 6
PHIL 252 246* ..... 3

## ADD NURSING MAJOR—ACCELERATED TRACK

## Accelerated Track for Bachelor of Science in Nursing

An accelerated track is available for non-nurses with a prior baccalaureate degree. Students in the accelerated track must complete the following prerequisite courses prior to admission: chemistry 100/110 (8 hours); anatomy (EEB 240, 4 hours); physiology (BCMB 230, 5 hours); microbiology 210 (3 hours); human development (CFS 210, 3 hours); nutrition 100 (3 hours); contemporary moral problems (philosophy 252: 3 hours); Nursing 201: Introduction to Nursing (2 hours); and statistics 201(3 hours).

Total prerequisite coursework: 33-34 hours (dependent on A\&P courses)

Comparable coursework may be taken as prerequisites at any accredited college or university and transferred to the University of Tennessee Knoxville. Prerequisites must be completed prior to the fall semester of admission into the Accelerated BSN track.

## Course Requirements (46 hours)

NURS 311 Foundations of Professional Nursing Practice ..... 5
NURS 319 Pathophysiology of Health Deviations ..... 4
NURS 333 Health Assessment ..... 3
NURS 342 Transcultural Issues ..... 2
NURS 351 Pharmacology I ..... 2
NURS 419 Nursing Care of Adults ..... 4
NURS 406 Pharmacology II ..... 2
NURS 415 Nursing the Childbearing Family ..... 4
NURS 420 Adult Health Immersion ..... 4
NURS 421 Mental Health Maintenance and Restoration ..... 5
NURS 432 Health Promotion and Maintenance Strategies in the Community ..... 3
NURS 444 Care of Children, Adolescents, and Their Families ..... 3
NURS 454 Professional Leadership Issues * ..... 2
NURS 471 Nursing Research ..... 3

# COLLEGE OF SOCIAL WORK 

## All changes effective Fall 2011

## PART I. COURSE CHANGES

(905) (SOWK) Social Work

REVISE REGISTRATION RESTRICTION
416 Social Welfare Policies and Issues (3)
Registration Restriction(s): Social work majors only; completion of 75 hours required.
Formerly: Registration Restriction(s): Social work majors only; minimum student level - senior.

## PART II. PROGRAM CHANGES

## REVISE COLLEGE TEXT (GRADING POLICY)

## Grading Policy

The Satisfactory/No Credit option is not permitted in the major. The minimum acceptable grade for all social work courses is a C. Courses, other than field, in which a C- or below Dor Fis achieved may be repeated once. Field courses must be completed with a
C or better and may not be repeated.
A student receiving a grade of incomplete (I) in any social work course must remove the Incomplete before enrollment in subsequent field practice.

## REVISE COLLEGE TEXT (PROGRESSION REQUIREMENTS)

## Progression Requirements

Students admitted to the university may request a faculty advisor from the College of Social Work. Prior to enrolling in upper-division social work courses, students in the college must successfully complete SOWK 200 or SOWK 207 and SOWK 250 with a grade of C or better, have a cumulative grade point average of 2.50 or higher, be in good academic standing, and have fulfilled most lowerdivision and General Education course requirements. Students in the college are encouraged to participate in community service and/or volunteer activities at a social service agency in advance of upper division social work course work. Students are advised that several field placement agencies and licensing boards require successfully passing a criminal background check.

## REVISE COLLEGE TEXT (HONORS CONCENTRATION)

## Honors Concentration

The honors concentration provides highly motivated social work majors with the opportunity to pursue advanced course work and complete a senior research project. All declared social work majors with a cumulative grade point average of at least 3.25 are invited to participate in the honors concentration. To graduate with honors, social work majors must complete 12 hours of honors work including at least 9 hours of social work honors courses. Students completing the honors concentration must take SOWK 417 and SOWK 467 and complete a senior research project. A grade of B or above must be earned in all honors courses and students must maintain an overall grade point average of 3.25 . Students are evaluated at the end of each semester. Students with cumulative grade point averages that drop below a 3.25 will incur probationary status and will be given one semester to raise their average above 3.25. Failure to improve one's cumulative grade point average during the probationary semester will lead to dismissal from the honors concentration. Students interested in honors at any level should consult with their academic advisor or the BSSW program director about participation in the honors concentration.

# FIRST-YEAR STUDIES PROGRAM 

## All changes effective Fall 2011

## COURSE CHANGES

## FIRST-YEAR STUDIES PROGRAM

(FYRS) First-Year Studies
DROP ACADEMIC DISCIPLINE AND ALL COURSES (CODE CHANGE)
101 First-Year Studies
129 Freshman Seminar
401 Peer Mentor Techniques
402 Peer Mentor Practicum

## (FYS) First-Year Studies

## ADD ACADEMIC DISCIPLINE AND COURSES (CODE CHANGE)

101 First-Year Studies (1) Integration into the academic community, including the nature and purpose of a college education, expectations for academic success, organization of university disciplines, and special emphasis on academic and career planning. Grading Restriction: A, B, C, No Credit grading.
Credit Restriction: Students may not receive credit for both First Year Studies 101 and Business Administration 100.
Registration Restriction(s): Freshmen only.
129 Freshman Seminar (1) Small, academic seminars that encourage the exchange of ideas between professors and students. For a current list of course topics consult http://www.utk.edu/freshmanseminar/
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 2 hours.
Registration Restriction(s): Freshmen only.

401 Peer Mentor Techniques (1) Training of upper-class students as mentors and advisors for freshmen. Includes cognitive and developmental theories of the college-age student, teaching and learning styles, group communication and listening techniques, and mentoring and advising skills.
Registration Permission: Consent of instructor.
402 Peer Mentor Practicum (1) Peer mentoring of first year studies students.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 3 hours.
(RE) Prerequisite(s): 401.
Registration Permission: Consent of instructor.
Equivalency Table

| Current Course (FYRS) | Equivalent Course Effective Fall 2011 (FYS) |
| :---: | :---: |
| 101 | 101 |
| 129 | 129 |
| 401 | 401 |
| 402 | 402 |

## ADD (NEW COURSE)

100 The Volunteer Connection (0) This online course serves as an academic component of the "Light the Torch: The First-Year Experience at UT" Program. The course consists of seven components each aiming at providing the first-year student with knowledge and skills necessary to the successful transition from high school learning to university learning and the UT/Knoxville community.
Grading Restriction: Satisfactory/No Credit grading only.

## ADDENDUM TO CURRICULUM COMMITTEE REPORT

## COLLEGE OF NURSING

ADD ADMISSION CRITERIA FOR NEW ACCELERATED NURSING TRACK

## Selection of Students

Students will be selected on the basis of the following criteria:

- Cumulative GPA for all courses completed.
- Cumulative GPA in required pre-requisite courses.
- Number of course withdrawals and repetitions.
- Grade improvement over time.
- Probability of completing all required prerequisite courses prior to fall semester.
- Interest in and commitment to nursing.
- Availability of space.

The admission process is highly selective, with more qualified applicants than spaces available. If a student is selected for admission but then fails to successfully complete all required prerequisites with a grade of C or better prior to the fall semester, the student will not progress into the accelerated BSN program.

## BANNER-RELATED REVISIONS FROM SPRING 2011 REGISTRATION

During the Spring 2011 registration period, the University Registrar's Office agreed to make "on-the-fly" changes to prerequisite, corequisite and/or registration restriction enforcement to ease the transition to the new Banner system. In return, the colleges agreed to follow up with a formal proposal to the UG Council within the next curricular review cycle.

## COLLEGE OF ARTS AND SCIENCES

## DEPARTMENT OF CHEMISTRY

## (235) (CHEM) Chemistry

DROP (RE) COREQUISITE, ADD (DE) COREQUISITE
368 Honors: Organic Chemistry II (3)
(DE) Corequisite(s): 369.
Formerly: (RE) Corequisite(s): 369.

## DEPARTMENT OF PHILOSOPHY

## (745) (PHIL) Philosophy

DROP (RE) PREREQUISITE, ADD RECOMMENDED BACKGROUND

## 300 Special Topics (3)

Recommended Background: One course in philosophy.
Formerly: (RE) Prerequisite(s): One course in philosophy.

## 320 Ancient Western Philosophy (3)

Recommended Background: One course in philosophy.
Formerly: (RE) Prerequisite(s): One course in philosophy.

## 322 Medieval Philosophy (3)

Recommended Background: One course in philosophy.
Formerly: (RE) Prerequisite(s): One course in philosophy.
324 17th- and 18th-Century Philosophy (3)
Recommended Background: One course in philosophy.
Formerly: (RE) Prerequisite(s): One course in philosophy.
326 19th- and 20th-Century Philosophy (3)
Recommended Background: One course in philosophy.
Formerly: (RE) Prerequisite(s): One course in philosophy.
327 Honors: Ancient Western Philosophy (3)
Recommended Background: One course in philosophy.
Formerly: (RE) Prerequisite(s): One course in philosophy.
328 Honors: 17th- and 18th-Century Philosophy (3)
Recommended Background: One course in philosophy.
Formerly: (RE) Prerequisite(s): One course in philosophy.

## 340 Ethical Theory (3)

Recommended Background: One course in philosophy.
Formerly: (RE) Prerequisite(s): One course in philosophy.
347 Honors: Ethical Theory (3)
Recommended Background: One course in philosophy.
Formerly: (RE) Prerequisite(s): One course in philosophy.
360 Philosophy of Science (3)
Recommended Background: Completion of natural sciences general education requirement.
Formerly: (RE) Prerequisite(s): Completion of natural sciences general education requirement.

395 Existentialism (3)
Recommended Background: One course in philosophy.
Formerly: (RE) Prerequisite(s): One course in philosophy.

## DEPARTMENT OF PHYSICS AND ASTRONOMY

## (773) (PHYS) Physics

REVISE (RE) PREREQUISITE
221 Elements of Physics (4)
(RE) Prerequisite(s): Mathematics 130 or 125 or 141 or 151 or 152.
Formerly: (RE) Prerequisite(s): Mathematics 130 or 141.

## UNIVERSITY HONORS PROGRAM

## UNIVERSITY HONORS PROGRAM

(983) (UNHO) University Honors

DROP (RE) PREREQUISITE, ADD (DE) PREREQUISITE
257 Special Topics in the Arts and Humanities (3)
(DE) Prerequisite(s): English 102 or English 118.
Formerly: (RE) Prerequisite(s): English 102 or English 118.
267 Special Topics in the Social Sciences (3)
(DE) Prerequisite(s): English 102 or English 118.
Formerly: (RE) Prerequisite(s): English 102 or English 118.
277 Special Topics in Cultures and Civilizations (3)
(DE) Prerequisite(s): English 102 or English 118.
Formerly: (RE) Prerequisite(s): English 102 or English 118.
287 Special Topics in the Natural Sciences (3)
(DE) Prerequisite(s): English 102 or English 118.
Formerly: (RE) Prerequisite(s): English 102 or English 118.

## GENERAL EDUCATION COMMITTEE REPORT

## December 8, 2010 Meeting Minutes

## Approved Courses

- WC
o AE 449 - Aerospace Engineering Laboratory (3)
o BME 430 - Biomedical Engineering Laboratory (3)
- COSC 400 - Senior Design (5)
o ENGL 251 - Introduction to Poetry (3)
o ENGL 252 - Introduction to Drama (3)
o ENGL 253 - Introduction to Fiction (3)
o IE 422 - Senior Problems Analysis (2)
o ME 449 - Mechanical Engineering Laboratory (3)
o PHIL 252 - Contemporary Moral Problems (3)
o PHIL 345 - Bioethics (3)
o PLSC 491 - International Study: History and Culture of International Gardens and Landscapes (3)
- NS
o GEOG 137 - Honors: Geography of the Natural Environment I (4)
- AH
o PHIL 101 - Introduction to Philosophy (3) (formerly PHIL 110 \& 111)
o PHIL 107 - Honors: Introduction to Philosophy (3) (formerly PHIL 117 \& 118)
o PHIL 252 - Contemporary Moral Problems (3) (formerly PHIL 242)
Four proposals (IE 422, COSC 400, CBE 498, CBE 490) are being reviewed for OC and will be submitted to the full committee for a vote at the January meeting. Proposals for SS and CC will also be reviewed at the J anuary meeting.


## Other Business

- R.J. Hinde will serve on the General Education Committee following Don Cox's retirement. A new AH subcommittee chair has not yet been named.
- The General Education Taskforce (chaired by Dixie Thompson) held its first meeting in late November. There is no specific agenda at this time. They are reviewing the structure of general education programs at other institutions. The group welcomes suggestions and input.
- Next meeting: Wednesday, January 19, 2011, 8:30am, UC 237

」anuary 19, 2011 Meeting Minutes

## Approved Courses

- WC
o ARTH 402 - Seminar in Art History II (3) (formerly AHIS 402)
o CE 205 - Professional Development I (2) (revise registration restriction)
o IE 350 - Contemporary Issues in Industrial Engineering II (1) (revise title, description, and contact hours)
o IE 422 - Industrial Engineering Design II (2) (new)
o NURS 494 - Alternative Preceptorship (4) (revise registration restriction)
o PHIL 345 - Bioethics (3) (formerly PHIL 246)
0
0
0
- AH

0
o ARTH 162 - Art of Africa, Oceania, and Pre-Columbian America (3) (formerly AHIS 162)
o ARTH 167 - Honors: Art of Africa, Oceania, and Pre-Columbian America (3) (formerly AHIS 167)
ARTH 172 - Western Art I (3) (formerly AHIS 172)
ARTH 173 - Western Art II (3) (formerly AHIS 173)
ARTH 177 - Honors: Western Art I (3) (formerly AHIS 177)
ARTH 178 - Honors: Western Art II (3) (formerly AHIS 178)
ARTH 183 - Asian Art (3) (formerly AHIS 183)
ARTH 187 - Honors: Asian Art (3) (formerly AHIS 187)
PHIL 244 - Professional Responsibility (3) (revise description)

- OC

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AE 410 - Professional Topics (2) (revise registration restriction)
ARTD 452 - Graphic Design Seminar (4) (formerly ADES 452)
BSE 401 - Biosystems Engineering Design I (2) (revise prerequisite)
CBE 488 - Honors: Design Internship in Green Engineering (3) (new)
CBE 490 - Process Design and Economic Analysis (3) (new)
COSC 400 - Senior Design (5) (new)
IE 422 - Industrial Engineering Design II (2) (new)
NURS 454 - Professional Leadership Issues (2) (revise registration restriction
    and recommended background)
PHIL 244 - Professional Responsibility (3) (revise description)
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- $\mathbf{Q R}$
o COSC 100 - Introduction to Computers and Computing (3) (revise credit hours and contact hour distribution)
o STAT 201 - Introduction to Statistics (3) (revise description)
- NS
o EF 157 - Honors: Physics for Engineers I (4) (revise registration restriction and recommended background)
EF 158 - Honors: Physics for Engineers II (4) (drop registration restriction)
- SS
o AREC 201 - Economics of the Global Food and Fiber System (3) (formerly AGEC 201)
o SOWK 250 - Social Welfare (3) (new)
- CC
o FDST 150 - History and Culture of Food (3) (new)
o MFLL 200 - Topics in International Literatures and Cultures (3) (new)


## Dropped Courses

- WC
o AHIS 402 - Seminar in Art History II (3) (now ARTH 402)
o PHIL 241 - Engineering Ethics (3)
o PHIL 243 - Business Ethics (3)
o PHIL 246 - Bioethics (3) (now PHIL 345)
o PHIL 290 - Social and Political Philosophy (3) (now PHIL 391)
- AH
o AFST 162 - Art of Africa, Oceania, and Pre-Columbian America (3) (now AFST 160)

AHIS 162 - Art of Africa, Oceania, and Pre-Columbian America (3) (now ARTH 162)
o AHIS 167 - Honors: Art of Africa, Oceania, and Pre-Columbian America (3) (now ARTH 167)
AHIS 172 - Western Art I (3) (now ARTH 172)
o AHIS 173 - Western Art II (3) (now ARTH 173)
o AHIS 177 - Honors: Western Art I (3) (now ARTH 177)
o AHIS 178 - Honors: Western Art II (3) (now ARTH 178)
o AHIS 183-Asian Art (3) (now ARTH 183)
o AHIS 187 - Honors: Asian Art (3) (now ARTH 187)
o PHIL 110 - The Human Condition: Values and Reality (3) (now PHIL 101)
o PHIL 111 - The Human Condition: Knowledge and Reality (3) (now PHIL 101)
o PHIL 117 - Honors: Introduction to Philosophy I (3) (now PHIL 107)
o PHIL 118 - Honors: Introduction to Philosophy II (3) (now PHIL 107)
o PHIL 241 - Engineering Ethics (3)
o PHIL 242 - Contemporary Moral Issues (3) (now PHIL 252)
o PHIL 243 - Business Ethics (3)
o PHIL 246 - Bioethics (3) (now PHIL 345)
o PHIL 245 - Environmental Ethics (3) (now PHIL 346)
o PHIL 290 - Social and Political Philosophy (3) (now PHIL 391)
o REST 244 - Professional Responsibility (3)

- OC
o ADES 452 - Graphic Design Seminar (4) (now ARTD 452)
o PHIL 242 - Contemporary Moral Issues (3) (now PHIL 252)
o REST 244 - Professional Responsibility (3)
- SS
o AGEC 201 - Economics of the Global Food and Fiber System (3) (now AREC 201)


[^0]:    * Meets University General Education Requirement.
    ${ }_{2}^{1}$ Choose from the University General Education list.
    ${ }^{2}$ Note that some electives have required prerequisites. The prerequisites are either required in the major or are listed below. See individual course descriptions for specific information. ALEC 450, AREC AGEG 315, AREC AGEG 342, AREC AGEG 355; BSET 202, BSET 452; MGT BUAD 201; EPP 325, EPP 410; ESS 442, ESS 444, ESS 462; IE 304, IE 423; MARK 300; PLSC 240, PLSC 410, PLSC 430, PLSC 434, PLSC 435.

[^1]:    Students pursuing a B.S. degree in the Department of Mathematics are eligible to participate in the University's VolsTeach program (http://volsteach.utk.edu/), which permits students to simultaneously complete a major in mathematics or science and receive secondary education teaching licensure within the 4 -year undergraduate degree program through the completion of a VolsTeach minor. For more information about VolsTeach, including advising associated with teaching licensure requirements, contact the Center for Enhancing Education in Mathematics and Science (100 Greve Hall).

[^2]:    * Meets University General Education Requirement.
    ${ }^{1}$ Must be completed by the end of the First Year.
    ${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature-course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
    ${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
    ${ }^{4}$-One course from: AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202.

[^3]:    * Meets University General Education Requirement.
    ${ }^{1}$ Must be completed by the end of the First Year.
    ${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year

[^4]:    * Meets University General Education Requirement.
    ${ }^{1}$ Must be completed by the end of the First Year.
    ${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities

[^5]:    * Meets University General Education Requirement.
    ${ }^{1}$ Must be completed by the end of the First Year.
    ${ }^{2}$ Students who complete ENGL 118 with a grade of $A$ or $B$ will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
    ${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
    ${ }^{4}$ Students admitted to Global Leadership Scholars will complete the honors versions of the e courses - ACCT 207, ECON 207, MGT 207 BUAD 207, STAT 207, FINC 307, BUAD 357, and MGT 407.
    ${ }^{5}$-One course from AFST 235, AFST 236; HIST 241, HIST 242, HIST 247, HIST 248, HIST 255, HIST 256, HIST 261, HIST 262; LAMS 251, LAMS 252; MDST 201, MDST 202. ${ }^{56}$ Students admitted to Global Leadership Scholars will fulfill 10 hours of electives with the following courses - BUAD 217, BUAD 317, BUAD 417, BUAD 427, and BUAD 497.
    ${ }^{67}$ Twelve hours from Any four courses chosen from: IB 409, IB 419, IB 429, IB 439, IB 449, IB 459, өf IB 469, IB 492, BUAD 400 or MGT 472; and IB 489.

[^6]:    * Meets University General Education Requirement.
    ${ }^{1}$ Must be completed by the end of the First Year.
    ${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the

[^7]:    * Meets University General Education Requirement.
    ${ }^{1}$ Must be completed by the end of the First Year.
    ${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. or a second-year literature course in the English Department. If the sophomore-level English second-year literature course appears on the list for the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
    ${ }^{3}$ MATH 141 is a prerequisite for STAT 201, which is taken during the second semester of the First Year. As a result, MATH 141 must be completed by the end of the first semester of the

[^8]:    * Meets University General Education Requirement.
    ${ }^{1}$ Must be completed by the end of the First Year.
    ${ }^{2}$ Students who complete ENGL 118 with a grade of $A$ or $B$ will complete their first year composition requirement by choosing ENGL 102, a sophomore-level course in the English department, or ENGL 355. If the sophomore-level English course appears on the Arts and Humanities list, the course may also be counted toward the Arts and Humanities requirement.
    ${ }^{3}$ MATH 125 or MATH 141 are prerequisites for STAT 201, which is taken during the second semester of the Second Year. As a result, either MATH 125 or MATH 141 must be completed by the end of the first semester of the Second Year.
    ${ }^{4}$ Choose one of the following courses: OMS 331; INMT 341, INMT 342 (INMT 341 prerequisite), INMT 442 (INMT 341 prerequisite), INMT 443 (INMT 341 prerequisite); STAT 340.

[^9]:    * Meets University General Education Requirement.
    ${ }^{1}$ Must be completed by the end of the First Year.
    ${ }^{2}$ Students who complete ENGL 118 with a grade of A or B will complete their first year

[^10]:    * Meets University General Education Requirement.
    ${ }^{1}$ Select 9 hours from RCS 320, RCS 411, RCS 412, RCS 441, RCS 480, RCS 484, RCS 493, RCS 495, RCS 497; HRT 425; MSE 220.

[^11]:    ${ }^{3}$ Acceptable senior electrical and computer engineering sequences are ECE 415-ECE 416, ECE 421-ECE 422, ECE 431-ECE 432, ECE 431-ECE 433, ECE 441-ECE 442, ECE 443-ECE 446, ECE 451-ECE 453, ECE 451-ECE454, ECE 451-ECE 455, ECE 453-ECE454, ECE 471-ECE 472, ECE 481-ECE 482.

[^12]:    * Meets General Education Requirement.
    ${ }^{1}$ See Social Sciences - University General Education Requirement. Select one course from the list other than ECON 201 and ECON 207.

[^13]:    ${ }^{2}$ See Arts and Humanities - University General Education Requirement. Select one course from the list.
    ${ }^{32}$ Chosen from AE 341*; BME 300; BUAD 361*, BUAD 410*; BULW 301; ECE 300*, ECE 206,
    ECE 255; ECE 300*, ECE 302; ECON 311*, ECON 312*, ECON 313\#, ECON 322*, ECON 331, ECON 333, ECON 351*, ECON 361; FINC 300\#, FINC 425*\#, FINC 455*; IE 423, IE 457, IE 483, IE 484; ECE 302; INSC 310, INSC 451 ${ }^{\star \#}$, MARK 300\#; MGT 300\#; MSE 220, MSE 302, MSE 340, MSE 360, MSE 390, MSE 405; ME 321, ME 363** ME 365\#, ME 405; NE 342. Courses denoted with * have a registration restriction. Courses denoted with \# have a prerequisite or corequisite that is not part of the industrial engineering program.
    ${ }^{43}$ See Cultures and Civilizations - University General Education Requirement. Select two courses from the list, or select a two-course sequence in a foreign language at the intermediate level, or select a six-hour intensive foreign language course at the intermediate level.
    ${ }^{54}$ See Arts and Humanities - University General Education Requirement. Select one course from the list other than PHIL 244 or REST 244, preferably PHIL 244*.

