THE UNIVERSITY OF MAINE
Graduate School

Graduate Board
Room 57, Stodder Hall
Thursday, February 26, 2015
3:00-4:30 pm

AGENDA

1. Approval of December 18 and January 22 Graduate Board minutes

2. February 10 Curriculum Committee Report

3. Quick items:

   - Graduate Hooding Ceremony
   - Second round of award nominations due **March 6, 2015**
   - Fellowship and assistantship recipients
   - Assistantship template letter
   - Update on Fall 2015 graduate applications
   - Update on VPEM search
   - Sweet Frog Fundraiser
   - IPhD guidelines as revised in Jan. / IPhD Faculty Criteria

4. Discussion of graduate strategic planning - themes and committee chairs (see handout)

5. Presentation from Monique LaRocque and Amy Gieseke, DLL

6. Items arising

Graduate Board
Room 57, Stodder Hall
Thursday, December 18, 2014

Attending: A. Pankaj, S. Belknap, C. Billiteri, E. Blomberg, J. Bolton, D. Bousfield, T. Bowden, S. Butler, J. Daigle, S. Delcourt, J. Ferland, B. Frederick, H. Hamlin, M. Hough, C. Kim, G. Markowsky, S. Marrs, D. Neivandt, S. Ohno, E. Pandiscio, J. Settele, M. Shea, D. Skonberg, J. Smith, and M. Socolow
Proxy: E. Groden for A. Alyokhin, J. Daigle for M. Day, A. Olson for A. Reeve,
Graduate School (GS): D. Poisson

1. Approval of minutes
   Motion to approve, seconded, 2 abstained

2. Short items:
   a. CGS Meeting Update
      C. Kim reported that she, D. Neivandt and S. Delcourt attended the Council of Graduate Schools (CGS) Annual meeting in Washington, DC and that they would each give a summary of some of the workshops/sessions they attended. She said many of the things they learned and information gathered will be topics of discussion for future GB meetings.
      Kim reported she attended the *Creating and Sustaining Successful Online Graduate Education Programs* workshop that examined the challenges and potential solutions universities face with online/distance programs. She added that she also attended the *Fundraising as a Critical Instrument for Improving Graduate Education* workshop that she believes will be useful in planning and developing the Strategic Plan.

      D. Neivandt stated he attended an informative workshop on *Assessment and Review of Graduate Programs* and learned what programs in other universities do and the structures they put in place to make program assessment meaningful and manageable. He said he also attended the *Legal Issues* workshop that focused on good behaviors and best practices that should be followed to prevent problems as well as a session on Post Docs that focused on difficulties they encounter because they are not considered students or faculty and measures to be taken to avoid having them fall through the cracks.

      S. Delcourt said he attended the *Addressing Challenging Graduate Student Situations* workshop targeting the broad scope of graduate student problems and how deans and staff can recognize and deal with difficult graduate student situations. He reported he also attended the *Supporting Students' Writing and Degree Completion* workshop that focused on thesis/dissertation boot camps and various models of writing support for students nearing degree completion. Delcourt reported that the last session of the meeting was on graduate enrollment management, a rapidly growing topic of interest among deans of graduate schools. Delcourt said that it was announced at the session that CGS is engaged in a relationship with Hobson's which runs the GRE to fund a comprehensive study on best practices on graduate enrollment management. He reported more information about this topic will be presented to the Board at future meetings.

b. AY 2015-16 Awards Process
S. Delcourt reported that, as in the past, the Graduate School awards will be sent out in 2 phases. Nominations for the first phase will be due in February and will include the teaching and research fellowships/assistantships which carry stipend, tuition and insurance. Nominations for the second phase will be due in early March and will include the tuition scholarships.

c. GradExpo schedule – call for volunteer judges
C. Kim reported the tentative schedule for the EXPO has been posted on the GSG website. Kim encouraged everyone to review the schedule and find a time that fits best for them and allows them to volunteer as a judge. She encouraged GB members and will encourage URC members, faculty senate members and departmental faculty to consider being judges. She requested that GB members return to the units they represent and ask for volunteers. She stressed the more judges we have the less time is required of them and, if there was a wide range of judges, each would be able to judge their specific area.

E. Sance addressed the Board regarding a recent discussion held on Sexual Assault, she said there will be a continuation to this discussion in the Spring.

C. Kim reported it was announced at the Faculty Senate meeting that faculty are obligated to report when a student or faculty member informs them of any possible violation to the polices governing sexual assault/harassment, or discrimination. She noted that faculty feared if confidentiality was not insured, students would not report the incidences, and it would inhibit them from being able to help students. Kim said that language would be added to all course syllabi that addresses this issue.

E. Sance reported that GSG reached out to the graduate students that were affected due to the elimination of the Applied Medical Sciences program at USM and that GSG has not received any responses from them yet.

Sance informed the Board that GSG has received 4 submissions for the Grad EXPO. She reported that Jan. 23 is the deadline and said a reminder will be sent out about a week before school starts. She said she is sending information to Administrative Specialists and Graduate Coordinators.

S. Delcourt reported that Denise Skonberg would be stepping down from the Executive Committee to go on sabbatical. He presented her with a gift set in thanks for all her service and announced that John Daigle has agreed to serve out the remainder of D. Skonberg's term.

3. S. Delcourt reported he participated in a workshop at CGS that dealt with providing assistance and support for students in distress. He circulated a sample of the scenario and said he wanted to remind Graduate Coordinators that the Graduate School would like to be alerted of students that are encountering physical or mental problems to insure they are getting the appropriate support as soon as possible. He said if a concerned parent contacts the Graduate Coordinator, he would appreciate an alert, and that the Graduate Coordinator should direct the parent to the Graduate School for graduate students or the College Associate Dean for undergraduates. He stressed the Graduate School needs to partner with the

Graduate Coordinator before making institutional decisions that might contain academic ramifications for the student. C. Kim noted S. Delcourt is a member of the Student Behavioral Review Team Committee through the Dean of Students office.

4. Final Review of DRAFT Graduate School mission statement
   C. Kim announced that the Executive Committee (EC) presented the Graduate Board with several versions of a revised mission statement. The EC took the comments, applied them to the current version and presents the following to the Graduate Board for approval:

   > The mission of the Graduate School of the University of Maine is to produce engaged scholars and professionals by promoting excellence in all aspects of the graduate student experience. The School provides advanced education and professional training through innovative teaching, mentorship, research, and creative activity in established and emerging areas. This rigorous education prepares students to contribute meaningfully to the advancement of the state of Maine, the nation and the global community.

   Motion to approve, unanimously approved.

5. Discussion of Strategic Planning Process
   C. Kim reported the strategy she would like to take with Strategic Planning is to have the EC come up with an outline of areas to be addressed in our strategic plan, that each EC member will act as Chair and form a subcommittee around an identified issue by reaching out to GB as well as to faculty members across the campus. After this initial work of the subcommittees is completed, D. Neivandt, S. Delcourt & C. Kim will write an executive summary to be submitted to the GB in May for review and comment over the summer and presented to the GB in the Fall for approval. C. Kim said, if anyone has ideas of what should be included in the outline, they should email them to her for consideration.

6. UGR 501 –Principles and Practices of Mentoring Research
   D. Neivandt addressed the Board on the Graduate Seminar UGR 501 *"Principles and Practices of Mentoring Research"*. He said the course is getting great reviews, is being offered again in the Spring, is interdisciplinary and he would like to see it populated with graduate students across campus. S. Delcourt explained that full-time thesis students in their final semester or doctoral candidates could take UGR 501 instead of a thesis credit as long as they had already satisfied the requirement of 6 thesis credits.

7. Items arising
   - G. Markowsky reported that the committee on streamlining paperwork met and have recommendations that they will be presenting to the Board in the near future. C. Kim thanked him and said she is looking forward to seeing their report.
   - J. Ferland requested the rationale of limiting 1 nominee per unit for the 10 CHASE awards. S. Delcourt responded that the CHASE awards draw more nominees than any of the other fellowship and assistantship awards, and for equity purposes, it is limited to one nominee per unit.
   - D. Skonberg questioned if a student completing a certificate program could put a credential after their name. S. Delcourt explained that this is not

possible because it is not a degree, but stressed they would receive a branded UMaine certificate that could be framed.

Graduate Board
Room 57, Stodder Hall
Thursday, January 22, 2015

Attending: A. Alyokhin (and for E. Blomberg WLE), S. Belknap, C. Billitteri, D. Bousfield, J. Daigle, M. Day, S. Delcourt, J. Ferland, B. Frederick, S. Gardner, A. Reeve, N. Hall, H. Hamlin, M. Hough, G. Zaro for C. Isenhour, S. Jain, A. Knightly, K. Kreutz, G. Markowsky, S. Marrs, S. Ohno, R. Moratz for H. Onsrud, E. Pandiscio, M. Shea, R. Bushway, M. Socolow, D. Neivandt and Y. Zhu

1. **Approval of December 18 Graduate Board minutes**
   Approval of the December minutes was deferred.

2. **Quick items:**

   - First round of award nominations due **February 6, 2015**
     D. Neivandt reminded the Board that February 26 is the deadline date for the first round of Graduate School award nominations and urged programs to solicit applications from great students.
   - Responsible Conduct of Research Requirement for XXX699
     D. Neivandt informed the Board that currently two courses other than INT 601 have been approved to satisfy the Responsible Conduct of Research Requirement and more are coming through the system. Neivandt explained to avoid continuously modifying the XXX 699 course descriptions it was decided that the following "blanket" prerequisite modification would be made to all XXX 699 courses (excluding GRR 699):

     Prerequisites & Notes
     A "Responsible Conduct of Research" course approved by the Office of Research and Sponsored Programs and the Graduate School (www.umaine.edu/graduate/responsible-conduct-research) is required before or concurrently with completion of 3rd XXX 699 credit.
     Permission

   - Sexual violence training:
     S. Delcourt addressed the Board regarding the updated BOT policy regarding sexual violence training that that is required for all faculty, staff, graduate and undergrad students. Delcourt said individuals should navigate to: https://mycampus.maine.edu/group/um/home scroll to "Complete Sexual Assault Training By End of the Semester" under UMS Employee Announcements, and click the "training" link. He said that in-person training is also available if a group is interested in getting trained all together. In this case, they should contact Karen Kemble in Equal Opportunity.

S. Belknap reported that GSG recently held an open seminar that included an EO representative to assist graduate students in fulfilling this requirement as a group but due to inclement weather the attendance was poor. He said the GSG intends to hold another seminar this semester and information will be sent out to Graduate Coordinators soon and he urged Board members to encourage their graduate students to take advantage of this opportunity. Delcourt asked how the UM System was alerted when students took the group training. Belknap responded that everyone in the group takes and submits the training individually on a computer, but that there is a facilitator present to address them and answer questions.

3. Discussion of draft plan to award selected TAs through a competitive process

D. Neivandt said the objective of this pilot plan is to use TAs to meet high undergraduate teaching needs, but also to provide financial support to graduate students in programs with little or no university-funded TA support. A committee was formed to look into the advantages and possibilities for sharing TAs in such a way and the following "Draft Plan for Sharing TA's" was presented to the Board for discussion and feedback.

Purpose: To pilot a process for sharing graduate student financial support between programs with high undergraduate teaching needs and programs that have the research capacity to enroll more graduate students, but limited E&G support for graduate students. In this first year, the Graduate School will pilot the sharing of 6 TAs (3 in Chemistry and 3 in Biology) which have been offered in the past on an *ad hoc* basis to meet increased undergraduate teaching needs and funded either through college resources or through resources provided centrally by the office of Academic Affairs. The Graduate School will provide tuition and insurance support for these one year positions to create an assistantship package comparable to the authorized positions held by the Graduate School.

Process: "Shared TAs" will be awarded through a process similar to other competitive Graduate School fellowships and assistantships. Specifically:

- Initial nominations are made by the Graduate Coordinator of individual units to the Graduate School. Nominated students may be new applicants or students in their first year of graduate study.

- The nomination materials shall consist of:
    - the resume of the student including academic transcripts
    - the resume of the advisor including funding, publication and graduate advising history
    - A statement from the potential research mentor regarding:
        - The research project that the student would be undertaking
        - The research duties expected of the student and associated weekly hours
        - The student's research qualifications
        - Why the student is particularly well suited to the research project
        - Means by which the student will be supported after TA support ends

- The Graduate School will perform an initial screening for competitiveness and completeness of the application and subsequently forward suitable nomination materials to the unit with the teaching obligation. Units with teaching obligations shall develop a brief description of the TA position including job duties and expected academic qualifications of the TA.

- The unit with the teaching obligation shall review all nominees and shall make a recommendation to the Graduate School regarding each nominee and the classes that s/he is qualified to teach.
- Nomination materials of qualified nominees shall be reviewed and assessed by the Executive Committee of the Graduate Board on the following criteria:
    - Academic qualifications of the student
    - Research qualifications of the faculty mentor
    - Capacity of the unit to support the student following the one year TA Teaching assistantship awards will be made for the following academic year. TAs selected through this process will be obligated to fulfill all duties normally expected of TAs in the teaching unit.

Timeline:
Mid January: Awards Announcement
Early February: Nominations Due at the Graduate School
Early March: Decisions made

Discussion followed with the Board being generally supportive of the plan. D. Neivandt thanked the Board for their comments.

4. Discussion of graduate strategic planning - themes and subcommittees:

Charge Issue 1 – The University of Maine has primary responsibility for graduate research, education and scholarship in Maine
Charge Issue 2 – Enhancement and selective growth of our graduate programs
Charge Issue 3 – Development and maintenance of interdisciplinary programs
Charge Issue 4 – Balancing quality and quantity in graduate programs
Charge Issue 5 – Funding our graduate mission
Charge Issue 6 – Marketing our graduate mission
Charge Issue 7 – Attracting increasingly better graduate students
Charge Issue 8 – The appropriate size and function of our Graduate School

S. Delcourt reported that the Executive Committee (EC) wanted to begin by having the Graduate Board review and discuss the above 8 Charge Issues taken from the previous 2006 strategic plan. The EC wanted input regarding whether all 8 Charge Issues should be included in the new strategic plan, and if there were other issues blatantly missing that should be added. He reported that the EC members will each chair a sub-committee to address one or more of the charge issues, and that the sub-committees will be comprised of members of the Grad Board, faculty and graduate students interested in serving on the sub-committees.

G. Markowsky said Charge Issue 1 should be a capital campaign and suggested a 200 million dollar fund raising campaign or a large endowment for the Graduate

School. He stressed many of the problems that face graduate education can be eliminated or improved if funding was available. S. Delcourt stressed that he agreed money is needed but in order to get the money a strong case needs to be made of what we intend to do with it. He also said that it's imperative that we address enrollment as part of the plan, because if we don't develop an enrollment management plan, one will be developed for the Graduate School. He also stressed the importance of competing with the best schools in the country regarding graduate student development. Delcourt said UMaine needs to provide things that actually go beyond the academic classroom experience for graduate students and work towards professional development.
Many GB members noted that many of the 8 charge issues overlapped and could be reduced. G. Markowsky agreed and said if there are too many small issues everything gets confused and nothing gets resolved.

A suggestion was made to combine some charge Issues that are somewhat related such as Charge Issues 5, 6, & 7.

S. Delcourt agreed that the plan needs to be narrowed down to a few important themes. He asked the Board members to send him up to 5 issues by email, and he would bring them to the Executive Committee to develop a frame work for the plan.

5. Items arising

The Graduate School

THE UNIVERSITY OF MAINE

5755 Stodder Hall, Room 42
Orono, Maine 04469-5755
Tel: 207.581.3291
Fax: 207.581.3232
umaine.edu/graduate

CURRICULUM COMMITTEE REPORT

The Curriculum Committee met on February 10th and recommends the following courses to the Graduate Board for approval at its February 26, 2015 meeting.

New Courses:

ART 640	Advanced Projects in Printmaking
CHY 578	NanoScience
CHY 523	Advanced Polymer Chemistry
SFR 544	Forest Resources Economics
SFR 577	Forest Landscape Management and Planning

Modifications:

DIG 580	Digital Curation Internship
SEI 501	Diversity in Development in Childhood
XXX 699	Thesis

THE UNIVERSITY OF MAINE

RECEIVED
JAN 14 2015
GRADUATE SCHOOL

NEW COURSE PROPOSAL/MODIFICATION/ELIMINATION FORM FOR GRADUATE COURSES

GRADUATE PROGRAM/UNIT: Department of Art

COURSE DESIGNATOR: ART COURSE NUMBER: 640 EFFECTIVE SEMESTER: Fall 2015

COURSE TITLE: Advanced Projects in Printmaking

REQUESTED ACTION:

NOTE: A complete syllabus is required for all new courses and for the addition of an electronic learning component [1] to an existing course.

NEW COURSE (check all that apply and complete Section 1):

- [x] New Course
- [ ] New Course with Electronic Learning[1]
- [ ] Experimental

MODIFICATION (Check all that apply and complete Section 2):

- [ ] Designator Change
- [ ] Number Change
- [ ] Title Change
- [ ] Description Change
- [ ] Prerequisite Change
- [ ] Credit Change
- [ ] Cross Listing (must be at least 400-level) [2]
- [ ] Addition of Electronic Learning Component [1]
- [ ] Other (specify) _____

ELIMINATION:

- [ ] Course Elimination

ENDORSEMENTS (Print name)	Date	Sign Initials
Leader, Initiating Department/Unit(s)		
Michael Grillo	9 December 2014	MG
College(s) Curriculum Committee Chair(s) [if applicable]		
Laura Artesani	1/13/15	LA
College Dean(s)		
Timothy M. Cole	1/13/15	TMC
Graduate School		

1. If a course involves significant electronic access for the primary delivery of its content (more than 50%), the course proposal should specify faculty training/experience in use of technology and how the electronic delivery will be managed. Please consult with the Office of Distance Education for more information.
2. Courses cross-listed below 400-level require the permission of the Graduate School.

SECTION 1 (FOR NEW COURSE PROPOSALS):

Proposed Catalog Description (include designator, number, title, prerequisites, credit hours):

ART 640 Advanced Projects in Printmaking

Project based graduate level study of printmaking through a variety and choice of printmaking media. Emphasis on creative research, conceptual and technical development. May be repeated for credit.

Credits 3

Prerequisites: Permission

Components (type of course/used by Student Records for MaineStreet) – *Multiple selections are possible for courses with multiple non-graded components:*

- ☐ Applied Music
- ☐ Clinical
- ☐ Field Experience/Internship
- ☐ Research
- ☒ Studio
- ☐ Laboratory
- ☐ Lecture/Seminar
- ☐ Recitation
- ☐ Independent Study
- ☐ Thesis

Text(s) planned for use:

None.

Course Instructor (include name, position, teaching load):

Susan Groce, Professor of Art, 3/3

Reason for new course:

Course to meet student demand/electives in iMFA, MLS, and iPHD graduate programs, Art teachers obtaining continuing education credits, and professional artists in the area seeking advanced level research and new technical information.

Does the course addition require additional department or institutional facilities, support and/or resources, e.g. new lab facilities, computer support and services, staffing (including graduate teaching assistants), or library subscriptions and resources?

- (●) No. The department will not request additional resources for this course.
- ( ) Yes. Please list additional resources required and note how they will be funded or supported.

What other departments/programs are affected (e.g. course overlap, prerequisites)? Have affected departments/programs been consulted? Any concerns expressed? Please explain.

We have spoken with Owen Smith, who has supported our creating this course as it will well serve the iMFA program. Everyone in the Department of Art supports adding this course.

How often will this course be offered? Will offering this course result in overload salary payments, either through the college or CED, either to the instructor of this course or to anyone else as a result of rearranging teaching assignments?

Once a semester or once a year, depending on student demand each year.

PROFESSOR: Susan Groce
Contact info:
Susan.groce@umit.maine.edu
Stewart Hall, RM # 161
207-581-3253
Office Hours: TBA; prior appointment appreciated. If these hours conflict with your schedule, other times may be arranged.
Print Studio Access:
Monday – Friday: Your scheduled class time and open access during non-scheduled class times (class schedules posted on door). Please note - access may occasionally be limited during special projects, if this is the case, adjusted open hours will be posted well in advance.
Saturday – Sunday: Building hours

Welcome to Printmaking!

Printmaking is an extremely flexible and unique medium, with a limitless range of possibilities. Recognized for it's inherent capacity to address concepts of reproducibility, multiples, collaboration, appropriation, alteration and serial imagery, printmaking is by no means limited to these notions. While printmaking incorporates skills from drawing, painting, sculpture, and digital technology, it has a language entirely of it's own – from traditional approaches to some of the most innovative forms. The vitality of the printmaking medium is widely evidenced in contemporary artistic practice, and the ubiquity of prints in today's cultural landscape. Your input into this vibrant medium is greatly anticipated – and most welcome.

Course Overview:
Print 640 is designed to explore printmaking's inherent experimental and interdisciplinary nature by providing a critical and interactive platform for students to focus on individual interests within a collaborative studio format.

Print 640 is a project-based course, constructed to give graduate students access to a range of print media. Introduction of new processes and advanced techniques, as appropriate for projects, will be addressed through a technical demonstration and discussion format. Our studio is set up to work with Acrylic Resist Etching, Etched and Non-etched Photopolymer Printing, Relief Printing (wood - western and Japanese (Moku Hanga) & linoleum), Screen Printing (hand work, photo), Polyester Plate lithography, Monotype/ Monoprint, and Collagraph printmaking techniques.

Thematic content is largely determined by individual selection for projects (with exception of collaborative themed exchange portfolios). You will be expected to work at an advanced technical and conceptual level, to explore and develop a unique set of interests; research content and professional artists who work with similar interests, and be able to discuss your work from a well thought out contextual position.

Class Structure:
Scheduled class time will consist of a mixture of technical demonstrations, instructions, shared inquiries and research, informal discussion, print viewing, project planning and work time with oversight and guidance, project review, and group critique.

Technical demonstrations:
You will be expected to research and experiment with different processes and materials as they relate to individual project work. Professor led technical demonstrations may initially cover quick reviews of basic techniques (if needed, as requested), and will quickly move on to introducing a variety of advanced techniques, processes and approaches in support of projected project work.

The Demo schedule will be refined after our first meeting - once we have discussed individual interests and project needs. Be sure to keep checking the posted schedule for any changes, and please bear in mind that it is impossible to show all techniques during the first few sessions; project work may need to be planned according to what can be shown when.

Typically demos will run during the first 1 – 1-½ hours of class time – so be on time. Thorough process notes will accompany technical demonstrations, but be sure to bring your notebook – hands on demonstrations encompass a myriad of details otherwise unexplained.

Class Participation and Attendance
Class attendance and participation is mandatory. Showing up for class and being physically present is not enough - you need to arrive on time, be conscious and attentive, and be in (we all hope) a good mood and productive form. Read the Syllabus, pay attention to the Demonstration Schedule, know what is planned and come prepared and equipped to take notes, ask questions, discuss, print and participate fully in all aspects of the course. In-class work time, designed for one on one feedback and guidance, is critical - be sure to plan ahead and use these times productively.
You will also need to schedule time outside of class to complete work required for this course. The workload is not unreasonable; but it is demanding and requires focus and a good work habits to succeed.
Critiques, whether individual or group, are considered extremely valuable parts of this course. Projects need to be ready to view at the time of designated critiques. Your ability to discuss your work, as well as the work of others, is of upmost importance.
As this class meets only once per week, more than 2 unexcused absences will result in a lowered grade; more than 4 absences will result in a failing grade. Arriving late three times counts as an absence. If you need to miss a class, it is highly advisable that you communicate with your professor (email is fine). Do not miss critiques.

Studio Etiquette:
The Printmaking Studio is a communal sanctuary of sorts – an environment of shared inquiry and creative exploration that supports individual, collective and collaborative productivity. In order to establish a functional and dynamic thinking and working

environment it is important to pay heed to the following expectations both during class time and in studio after hours:

- Clean and tidy work areas as you go – always clean up after yourself, and leave the studio in better condition than when you found it. Return all tools and materials to designated locations so that others may readily find them. Help to oversee the studio by reminding others to do the same.
- Before using any materials or equipment in the studio, it is imperative that you are familiar with the proper procedures for use, and clean up, and that you have addressed all safety requirements (including training record check off sheets and MSDS sheets).
- Work only with supplies and equipment you have been trained to use, otherwise DO NOT USE IT. If you notice any improper or unsafe use of equipment and materials – please speak with the person directly; if that does not clear the problem please alert the print shop technician, or Professor.
- If you damage or break equipment, please alert the print technician, or Professor as soon as possible (so that we can get things up and running with out too much delay); and leave a note explaining the problem for others who might want to work in the interim. Better yet - take great care of equipment in the first place to prevent damage…
- You may not remove materials from the studio to use at home, or use class materials for projects not related to the printmaking course you are enrolled in.
- Music/Radio/Conversation in off hours – please be considerate of others who may not be able to concentrate. Music/Radio is fine by consensus - otherwise please use earphones.
- Appropriate attire: because we work with corrosives, you must wear closed shoes (no sandals). Also when working with corrosives, you must wear neoprene gloves and visor or goggles. Disposable protective gloves must be worn for inking. Cloths that you care about, and want to keep in pristine condition seem to be attractants for ink – wear cloths that you can work in, and can get messy. We have some aprons in the shop – but a limited supply – it's recommended that you bring your own apron or work shirt.
- No alcohol or drugs are allowed under any circumstances in the studio at any time.
- Any violation of the above or behavior determined by the Professor to be unsafe or disruptive to the learning process and productivity of others may result in the removal of the student from class or access to the studio in unsupervised after hours.

Clean - up assignment:

- Each student will be assigned a specific clean up task, which will take on average, about 15 minutes per week. This will constitute a percentage of Studio Etiquette under grading.

Professionalism:

Respectful and proper communication with peers, instructors and staff is expected at all times. Please keep all scheduled appointments, turn off cell phones during class (or keep

on vibrate ONLY for emergency situations), and only use laptops in class for print class related research during appropriately designated work sessions.

Course Requirements and Expectations

Graduate students are expected to complete the equivalent of 4 major print projects (detailed in Assignment Handouts), keep a Journal/Sketchbook, participate in all class activities (demos, critiques, research, discussions, in-class work time) and turn in a Midterm and a Final Portfolio complete with artist self evaluations.

Project Work:

- Expectation is for advanced level depth in research; skill and complexity in repeating mediums and exploration of highly individualized content and presentation.
- Project proposals, with both written content and preliminary image work are required, and must be approved before commencing project work
- The required Projects will cover a variety of structural formats, materials and processes, and conceptual parameters.

Reading and reference list:

- Your first class folder contains an extensive list of texts and online resources. As project choices take shape, you will be individually guided to specific texts, notes, resources, and related artist work.

ASSESSMENT

Portfolios and Journal/Sketchbooks will be collected at midterm and on the final day of class for grading; see demo schedule for specific dates (these same dates will also be the midterm and final critique dates). If work is site specific, an installation or does not fit into standard portfolios, individual arrangements for assessment will be made.

PORTFOLIOS

Name and course number must be written clearly on the outside cover of the portfolio. Work inside should be neatly arranged and the portfolio design should have work easily accessible to the viewer via the standard single bottom hinge and sides that open (no boxes, rubber bands, cylinders, or tape). The outside must be made of a sturdy material that can withstand stacking. Also no folded work, extra papers, work not pertaining to this course, or plates. Written self-evaluations must be 'typed' and placed inside the front flap of your portfolio.

Projects should be divided, and clearly labeled in the appropriate manor, from proofs to B.A.T. to the final edition(s), or provide clear instructions for alternative viewing formats. Presentation of installation work, or work that does not conform to portfolio specifications must be 'arranged' with instructor prior to portfolio collection dates. Remove smudges, clean edges, and slip-sheeted with cut (not torn) pieces of newsprint or glassine. Include preliminary sketches for project work; if they are within your sketchbook make sure you tag pages in a visible and comprehensible

manor. Do not include plates. As our mutual aim is for the highest quality work possible, you may rework, and resubmit any of the projects from the entire semester with your final portfolio. Failure to follow these simple directions can result in the rejection of your submission.

Late portfolios will not be accepted. Portfolios not picked up by designated pick up date at the end of term will either become part of the teaching portfolio – or will be tossed; we simply do not have storage space. If you are unable to pick up your portfolio, arrange to have your portfolio picked up for you.

With your permission, certain proofs or final prints may be requested for the Teaching Portfolio collection. With your permission, collected works may also be used for exhibition and/or University publications or web site. The choice is yours and will have no bearing on your grades.

GRADES

You will be assessed on the depth of your inquiry and research, tenacity and resourcefulness in problem solving, development of technical, conceptual and aesthetic skills and openness to take creative risks. Consistency of effort and progress throughout the term are also factors in assessment – while all effort is welcome, please bear in mind that sporadic activity and production occurring only just prior to critiques, assignment due dates and portfolio reviews are not only indications of lack of commitment but are counterproductive to studio co-habitation and fully exploring the printmaking process. You are always welcome to make an appointment to meet with me if you need clarification on grading process, or wish to discuss grades.

Grading breakdown:
Portfolio: Completion of assignments and comprehension of process, technical quality, and personal engagement of content and concept. Evolutionary Growth (experimenting, taking risks, responding to suggestions, notebook preparatory work, personal evaluations as evidenced in artist statements) 85%
Participation in class discussion, critique, print community and Department of Art events: Studio Etiquette, Professionalism, and adherence to Safety and OSHA regulations; mandatory final studio clean up: 15%

Grade definitions:

A. Consistent excellence in all course objectives. High degree of self-motivation demonstrated in consistent growth, and complex problem solving. Thorough engagement with research and concept development.
B. Above average quality of work and consistent growth, demonstrated understanding of course objectives. Thorough engagement with research and concept development.
C. Completion of all required work; satisfactory course understanding and class participation.
D. Deficiency of required work, understanding course objectives and class participation.

F. Extreme deficiency of required work, understanding course objectives and class participation

Safety Requirements:
At UMaine we are committed to using the safest, greenest materials possible for professional results, and environmental and body health. While we practice safer printmaking, it is important to note that we still use equipment and some materials that fall under OSHA and safety regulations.

You may not use equipment or materials you have not be trained and/or given permission to use – be sure to request demos and/or technical sheets as appropriate.

You are required to read relevant MSDS sheets (located in the studio) and keep updated individual training records - also located, and kept in the studio. We will go over these during the first class session; you must check off items 1-4 on the individual training records, and specific materials, and equipment prior to use. If you use any equipment or materials without first checking them off, you will be held accountable, and responsible. You may not remove any materials from the studio to use at home. Refer to handouts: Safety Requirements and Training Records (which will be handed out the first week of classes)

Appropriate attire: because we work with corrosives, you must wear closed shoes (no sandals). Also when working with corrosives, you must wear the neoprene gloves and visor/goggles. Thin disposable gloves must be worn for inking – try to avoid latex, as there are those with latex allergies.

General Course Objectives:

- Create prints using a variety of print techniques and processes that demonstrate technical understanding and proficiency, conceptual and aesthetic consideration, individual solutions and an appreciation for craft
- Evaluate, analyze, and interpret print images (own and others) through the process of critique using terms, vocabulary and concepts appropriate to the medium
- Engage with the community of printmakers and work collaboratively toward course objectives. Be aware of national/international community of printmakers and printmaking organizations.
- Exemplify disciplined and consistent work habits
- Develop a curiosity and openness to explore possibilities of the print medium, beyond safe and concrete solutions, by creative risk-taking, research, and experimentation.
- Work through and meet each project with independently set goals and solutions

Academic Honesty Statement: Academic honesty is very important. It is dishonest to cheat on exams, to copy term papers, to submit papers written by another person, to fake experimental results, or to copy or reword parts of books or articles into your own papers without appropriately citing the source. Students committing or aiding in any of these

violations may be given failing grades for an assignment or for an entire course, at the discretion of the instructor. In addition to any academic action taken by an instructor, these violations are also subject to action under the University of Maine Student Conduct Code. The maximum possible sanction under the student conduct code is dismissal from the University.

Accommodations

If you need course adaptations or accommodations because of disability, please contact Ann Smith, Director of Disability Support Services (East Annex, 581-2319).

Sexual Discrimination Reporting

The University of Maine is committed to making campus a safe place for students. Because of this commitment, if you tell a teacher about an experience of **sexual assault, sexual harassment, stalking, relationship abuse (dating violence and domestic violence), sexual misconduct or any form of gender discrimination** involving members of the campus, **your teacher is required to report** this information to the campus Office of Sexual Assault & Violence Prevention or the Office of Equal Opportunity.

> **If you want to talk in confidence** to someone about an experience of sexual discrimination, please contact these resources:
>
> For *confidential resources on campus*: **Counseling Center: 207-581-1392** or **Cutler Health Center: at 207-581-4000**.
> For *confidential resources off campus*: **Rape Response Services:** 1-800-310-0000 or **Spruce Run**: 1-800-863-9909.
>
> **Other resources:** The resources listed below can offer support but may have to report the incident to others who can help:
>
> For *support services on campus*: **Office of Sexual Assault & Violence Prevention: 207-581-1406, Office of Community Standards: 207-581-1409, University of Maine Police: 207-581-4040 or 911**. Or see the OSAVP website for a complete list of services at http://www.umaine.edu/osavp/

Course Schedule Disclaimer (Disruption Clause): In the event of an extended disruption of normal classroom activities, the format for this course may be modified to enable its completion within its programmed time frame. In that event, you will be provided an addendum to the syllabus that will supersede this version.

This Syllabus serves as a contract between the professor and the student.

THE UNIVERSITY OF MAINE

RECEIVED
NOV 13 2014
GRADUATE SCHOOL

NEW COURSE PROPOSAL/MODIFICATION/ELIMINATION FORM FOR GRADUATE COURSES

GRADUATE PROGRAM/UNIT: Chemistry

COURSE DESIGNATOR: CHY COURSE NUMBER: 523 EFFECTIVE SEMESTER: Fall 2015

COURSE TITLE: Advanced Polymer Chemistry

REQUESTED ACTION:

NOTE: A complete syllabus is required for all new courses and for the addition of an electronic learning component [1] to an existing course.

NEW COURSE (check all that apply and complete Section 1):

- [X] New Course
- [ ] New Course with Electronic Learning [1]
- [ ] Experimental

MODIFICATION (Check all that apply and complete Section 2):

- [ ] Designator Change
- [ ] Number Change
- [ ] Title Change
- [ ] Description Change
- [ ] Prerequisite Change
- [ ] Credit Change
- [ ] Cross Listing (must be at least 400-level) [2]
- [ ] Addition of Electronic Learning Component [1]
- [ ] Other (specify) _____

ELIMINATION:

- [ ] Course Elimination

ENDORSEMENTS (Print name)	Date	Sign Initials
Leader, Initiating Department/Unit(s)		
Barbara J.W. Cole	11-7-14	BJWC
College(s) Curriculum Committee Chair(s) [if applicable]		
Laura Artesani	11/12/14	LA
College Dean(s)		
Timothy M. Glover	11/12/14	TMG
Graduate School		

1. If a course involves significant electronic access for the primary delivery of its content (more than 50%), the course proposal should specify faculty training/experience in use of technology and how the electronic delivery will be managed. Please consult with the Office of Distance Education for more information.
2. Courses cross-listed below 400-level require the permission of the Graduate School.

SECTION 1 (FOR NEW COURSE PROPOSALS):

Proposed Catalog Description (include designator, number, title, prerequisites, credit hours):

CHY 523: Advanced Polymer Chemistry

Course description: Polymer types, synthesis kinetics and mechanisms, characterization techniques, and molecular structure and applications in contemporary polymer science concepts and literature.

Credit hours: 3
Prerequisite: A grade of C- or better in CHY 252 or equivalent; or permission
Because of overlap, CHY 423 and CHY 523 cannot both be taken for degree credit.

Components (type of course/used by Student Records for MaineStreet) – *Multiple selections are possible for courses with multiple non-graded components:*

- ☐ Applied Music
- ☐ Clinical
- ☐ Field Experience/Internship
- ☐ Research
- ☐ Studio
- ☐ Laboratory
- ☒ Lecture/Seminar
- ☐ Recitation
- ☐ Independent Study
- ☐ Thesis

Text(s) planned for use:

Paul Hiemenz and Tim Lodge, "Polymer Chemistry," 2nd Ed., CRC Press, 2007.

Course Instructor (include name, position, teaching load):

William M. Gramlich, Assistant Professor of Chemistry, 25%

Reason for new course:

The new course provides much needed variety to the Chemistry graduate curriculum. Moreover, many graduate students who do research in Chemistry, Chemical Engineering, Bioengineering, and the Advanced Structures and Composites Center work with polymeric materials. This course will provide the fundamentals to read and understand contemporary polymer concepts and literature which will aid them in their research.

Does the course addition require additional department or institutional facilities, support and/or resources, e.g. new lab facilities, computer support and services, staffing (including graduate teaching assistants), or library subscriptions and resources?

- (•) No. The department will not request additional resources for this course.
- ( ) Yes. Please list additional resources required and note how they will be funded or supported.

What other departments/programs are affected (e.g. course overlap, prerequisites)? Have affected departments/programs been consulted? Any concerns expressed? Please explain.

None

How often will this course be offered? Will offering this course result in overload salary payments, either through the college or CED, either to the instructor of this course or to anyone else as a result of rearranging teaching assignments?

Alternating years. No overload.

SECTION 2 (FOR COURSE MODIFICATIONS):

Current catalog description (include designator, number, title, prerequisites, credit hours):

Proposed catalog description (include designator, number, title, prerequisites, credit hours):

Reason for course modification:

SECTION 3 FOR COURSE ELIMINATIONS:

Reason for Elimination

Course Description and Syllabus

CHY 523: Advanced Polymer Chemistry

Course description: Polymer types, synthesis kinetics and mechanisms, characterization techniques, and molecular structure and applications in contemporary polymer science concepts and literature.

Because of overlap, CHY 423 and CHY 523 cannot both be taken for degree credit.

Credit hours: 3

Prerequisite: A grade of C- or better in CHY 252 or equivalent; or permission

Faculty Information

Name: Prof. William M. Gramlich
Phone: (207) 581-1173
E-mail address: william.gramlich@maine.edu
Office: 171 Aubert Hall
Office hours: To be determined

Textbook and Supplementary Materials

Required textbook and documents: Paul Hiemenz and Tim Lodge, "Polymer Chemistry," 2nd Ed., CRC Press, 2007. Various journal articles will be provided throughout the semester as additional sources of information.

Supplementary references: George Odian, "Principles of Polymerization," 4th Ed., Wiley, 2004.

Course Communication through Blackboard

The online program Blackboard will be used to disseminate all course material – including supplementary readings, announcements, and problem set assignments. Please make sure you can access Blackboard and these materials. (www.courses.maine.edu)

Course Goals

Students will develop a fundamental understanding of polymer synthesis, structure, and characterization to understand and summarize contemporary polymer science concepts and literature.

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Distinguish between and name different polymers using repeat unit and monomer structure.
2. Calculate the molecular weight and dispersity of polymers.
3. Explain and draw the polymerization mechanisms for various polymerization techniques.
4. Identify and describe polymerization mechanisms through their kinetic behavior.
5. Predict whether a particular polymerization technique will work for a given monomer and initiator system.
6. Draw molecular structures of polymers including end groups, architecture, and isomer variations.
7. Describe copolymerization in terms of monomer reactivity, copolymer composition, and polymerization kinetics.
8. Describe the information provided by thermal and molecular characterization techniques.
9. Summarize and comprehend current polymer chemistry scientific literature.

Instructional Objectives

Students will apply the topics covered in class to expand their understanding and reasoning skills related to polymer synthesis and characterization. Emphasis is placed on understanding the how and why of the polymer chemistry phenomenon and applying them to problem solving rather than simply remembering facts.

Grading

Grades will be based on performance on problem sets, in-class exams, and an in-class final as follows:

Problem Sets	30%
Exams (2)	40%
Final Exam	30%
	100%

Contemporary polymer chemistry literature will supplement class lectures and will be assigned as extra reading. Some of the questions on problem sets, exams, and the final will come from these literature readings. The content of these articles will not be covered in detail in the class period; however, students will still be responsible for their information.

Problem sets (30%) will be assigned regularly throughout the semester with problems from the required textbook as well as supplementary problems provided by the instructor. These problem sets will be due at the date and time indicated on the assignment.

Two in-class exams (20% each) will be given over the concepts covered in the course up to that point. The exams will emphasize content covered since the last exam, but will still be somewhat cumulative as the later material builds on the foundation of the earlier material.

A cumulative final (30%) will be given during the scheduled final exam period.

Letter grades will be based on a weighted average of percentage points earned:

A: 88–100%, B: 75–87%, C: 62–74%, D: 50–61%, F: <50%

Course Expectations

Please plan on attending all classes. If you will miss a class, please let the instructor know. Problem sets will not be accepted late and no make-up exams will be scheduled except those due to emergencies.

Tentative Course Schedule

Week	Topics
1	Polymer Structure and Nomenclature
2	Molecular Weight and Spatial Extent
3	Step Polymerization
4	Step and Radical Chain Polymerization
5	Radical Chain Polymerization
6	Living Polymerizations
7	Controlled Radical Polymerization
8	Controlled Radical and Equilibrium Polymerizations
9	Ring Opening and Metathesis Polymerizations
10	Copolymerization
11	Copolymerization
12	Stereochemistry of Polymerizations
13	Polymer Thermodynamics
14	Polymer Characterization Techniques and Structure Property Relationships

Academic Honesty

Academic honesty is very important. It is dishonest to cheat on exams, to copy term papers, to submit papers written by another person, to fake experimental results, or to copy or reword parts of books or articles into

your own papers without appropriately citing the source. Students committing or aiding in any of these violations may be given failing grades for an assignment or for an entire course, at the discretion of the instructor. In addition to any academic action taken by an instructor, these violations are also subject to action under the University of Maine Student Conduct Code. The maximum possible sanction under the student conduct code is dismissal from the University.

Students with disabilities
If you have a disability for which you may be requesting an accommodation, please contact Ann Smith, Director of Disabilities Services, 121 East Annex, 581-2319, as early as possible in the term.

Course Schedule Disclaimer (Disruption Clause)
In the event of an extended disruption of normal classroom activities, the format for this course may be modified to enable its completion within its programmed time frame. In that event, you will be provided an addendum to the syllabus that will supersede this version.

Sexual Discrimination Reporting
The University of Maine is committed to making campus a safe place for students. Because of this commitment, if you tell a teacher about an experience of sexual assault, sexual harassment, stalking, relationship abuse (dating violence and domestic violence), sexual misconduct or any form of gender discrimination involving members of the campus, your teacher is required to report this information to the campus Office of Sexual Assault & Violence Prevention or the Office of Equal Opportunity.

If you want to talk in confidence to someone about an experience of sexual discrimination, please contact these resources:

For confidential resources on campus: Counseling Center: 207-581-1392 or Cutler Health Center: at 207-581-4000.

For confidential resources off campus: Rape Response Services: 1-800-310-0000 or Spruce Run: 1-800-863-9909.

Other resources: The resources listed below can offer support but may have to report the incident to others who can help:

For support services on campus: Office of Sexual Assault & Violence Prevention: 207-581-1406, Office of Community Standards: 207-581-1409, University of Maine Police: 207-581-4040 or 911. Or see the OSAVP website for a complete list of services at http://www.umaine.edu/osavp/

THE UNIVERSITY OF MAINE

RECEIVED
JAN 14 2015
GRADUATE SCHOOL

NEW COURSE PROPOSAL/MODIFICATION/ELIMINATION FORM FOR GRADUATE COURSES

GRADUATE PROGRAM/UNIT: Chemistry

COURSE DESIGNATOR: CHY COURSE NUMBER: 578 EFFECTIVE SEMESTER: Fall 2015

COURSE TITLE: NanoScience

REQUESTED ACTION:

NOTE: A complete syllabus is required for all new courses and for the addition of an electronic learning component [1] to an existing course.

NEW COURSE (check all that apply and complete Section 1):

- [x] New Course
- [ ] New Course with Electronic Learning[1]
- [ ] Experimental

MODIFICATION (Check all that apply and complete Section 2):

- [ ] Designator Change
- [ ] Number Change
- [ ] Title Change
- [ ] Description Change
- [ ] Prerequisite Change
- [ ] Credit Change
- [ ] Cross Listing (must be at least 400-level) [2]
- [ ] Addition of Electronic Learning Component [1]
- [ ] Other (specify) _____

ELIMINATION:

- [ ] Course Elimination

ENDORSEMENTS (Print name)	Date	Sign Initials
Leader, Initiating Department/Unit(s)		
Barbara Cole	12-17-14	BJMC
College(s) Curriculum Committee Chair(s) [if applicable]		
Laura Artesani	1/13/15	LA
College Dean(s)		
Emily A. Haddad / Timothy M. Cole	1/13/15	TMC
Graduate School		

1. If a course involves significant electronic access for the primary delivery of its content (more than 50%), the course proposal should specify faculty training/experience in use of technology and how the electronic delivery will be managed. Please consult with the Office of Distance Education for more information.
2. Courses cross-listed below 400-level require the permission of the Graduate School.

SECTION 1 (FOR NEW COURSE PROPOSALS):

Proposed Catalog Description (include designator, number, title, prerequisites, credit hours):

CHY 578 Nanoscience
Fundamental concepts in nanoscience explored: Scaling principles, nanoscale materials, micro/nano fabrication techniques, atomic manipulations and nanorobotics. Because of overlap between, CHY 477, ECE 457 and CHY 578 only one can be taken for degree credit. Cr. 3.
Prerequisites: CHY 122 (or CHY 131), PHY 122, and MAT 258; CHY 471 and CHY 472 recommended, but not required; or permission.

Components (type of course/used by Student Records for MaineStreet) – *Multiple selections are possible for courses with multiple non-graded components:*

- [x] Applied Music
- [ ] Clinical
- [ ] Field Experience/Internship
- [ ] Research
- [ ] Studio
- [ ] Laboratory
- [x] Lecture/Seminar
- [ ] Recitation
- [ ] Independent Study
- [ ] Thesis

Text(s) planned for use:

1. Nano: The Essentials. Understanding Nanoscience and Nanotechnology, T. Pradeep
2. Nanotechnology: Understanding Small Systems. Ben Rogers, Sumita Pennathur, and Jesse Adams
3. Introduction to Nanoscience. S. M. Lindsay

Course Instructor (include name, position, teaching load):

Scott D. Collins, Prof. of Chemistry, Teaching Load 50%
Prof. Rosemary L. Smith, Prof. of Electrical and Computer Engineering, 50%

Reason for new course:

This course is a graduate extension of a newly developed undergraduate course, CHY 477, in nanoscience. Both CHY 477 and CHY 577 are intended to expose the student to the burgeoning field of nanoscience and nanotechnology. These courses have been taught during the past 3 years under a topics course, CHY 571, with an enrollment anywhere between 12-25 students. The success of the class has inspired permanent addition to the curriculum.

Does the course addition require additional department or institutional facilities, support and/or resources, e.g. new lab facilities, computer support and services, staffing (including graduate teaching assistants), or library subscriptions and resources?

- (•) No. The department will not request additional resources for this course.
- ( ) Yes. Please list additional resources required and note how they will be funded or supported.

What other departments/programs are affected (e.g. course overlap, prerequisites)? Have affected departments/programs been consulted? Any concerns expressed? Please explain.

The course does not impact any other department or program, nor is there any substantial overlap with other courses on campus. All prerequisites for the course are routinely taught classes.

How often will this course be offered? Will offering this course result in overload salary payments, either through the college or CED, either to the instructor of this course or to anyone else as a result of rearranging teaching assignments?

This course will be taught every other year. It is not anticipated to involve any overload salaries or additional institutional resources.

SECTION 2 (FOR COURSE MODIFICATIONS):

Current catalog description (include designator, number, title, prerequisites, credit hours):

N/A

Proposed catalog description (include designator, number, title, prerequisites, credit hours):

N/A

Reason for course modification:

N/A

SECTION 3 FOR COURSE ELIMINATIONS:

Reason for Elimination

N/A

Course Description and Syllabus

Course Information
Course designator, number, and full title: CHY 578: Nanoscience

Course description:
Fundamental concepts in nanoscience explored: Scaling principles, nanoscale materials, micro/nano fabrication techniques, atomic manipulations and nanorobotics. Because of overlap among CHY 477, ECE 457 and CHY 578 only one can be taken for degree credit.

Number of credit hours: 3
Prerequisites: CHY122 (or CHY131), PHY122 and MAT258 or permission of instructor. CHY471 & CHY472 recommended, but not required.

Faculty Information

Name: Professor Scott D. Collins
Phone, fax numbers: 581-2269; Fax: 581-2255
E-mail address: scott.collins@maine.edu

Students may also leave messages with staff in the Chemistry department office (156 Aubert Hall) or in the administrative office of LASST (5708 ESRB/ Barrows Hall).

Office hours: 1 hr/week –day/time to be announced during the first week of class and distributed with class syllabus.

Instructional Materials and Methods

Textbook: none required. Course handouts supplied digitally.
Reference texts: These are texts from which course material will be derived, but they are not required for the course. They will be put on reserve in the Library for limited checkout.

- Nano The Essentials, T. Pradeep, McGraw Hill
- Introduction to Nanoscience S. M. Lindsey, Oxford Press
- Introduction to Nanoscience, Hornyak, Dutta, Tibbals, Rao, CRC Press
- Nanophysics and Nanotechnology, Wolf, Wiley-VCR
- Fractals, Form, Chance, and Dimension, Mandelbrot, W.H. Freeman
- Basics of Nanotechnology, Rubahn, Wiley-VCH.

All lectures, quiz solutions, and other course materials will be posted to a First-Class folder or Blackboard as pdf formatted files. In addition, website links to demonstration videos and additional reading material will be posted for students as a resource (not a requirement). Students will be instructed in how to access and use on-line posted course materials during the first week of classes.

Student Learning Outcomes

Course Goals:

- Students will have a working knowledge of the term "nanoscience".
- Students will have a basic comprehension of why and how nanoscale behavior and properties present new scientific and technological opportunities.
- Students will be familiar as to how science and engineering at the nanoscale are driving a new age of technological development and scientific discoveries.
- Students will be proficient in applying nanoscience concepts to solve advanced scientific questions.

Instructional Objectives:

- Students will be familiar with the progression in scale from macro to mini to micro to nano, and how classical scaling laws transition to quantum mechanics
- Students will be familiar with the terminology of nanoscience.
- Students will have a working knowledge of equipment and processes used to produce and characterize nanoscale structures and devices.
- Students will be familiar with how nanotechnology impacts multiple scientific and engineering fields.

Student Learning Outcomes:

- Upon completion of this course, students will have gained a vocabulary sufficient to converse with experts in the field.
- Students will be able to identify and classify characteristics and behaviors that are associated with the nanoscale.
- Students will recognize nanoscience and nanotechnology when encountered in scientific journal articles and other media.
- Students will be familiar with specific applications of nanoscience and nanotechnology and how they affect daily life.
- Students will be comfortable applying nanoscience and nanotechnology to current research projects.

Grading and Course Expectations

Grading criteria (tentative):

	% of grade
Homework	10%
Weekly quizzes	20%
1 Mid-term in-class exam	20%
1 Take-home exam	20%
1 Final exam	30%

Expectations for student engagement "beyond" the classroom wall:

-- Students are expected to complete reading and homework exercises in accordance with the posted instructions and due dates.

-- Students may be asked to participate in course evaluations, surveys and/or interviews conducted by an independent evaluator, for the purpose of assessing the course effectiveness in realizing student learning outcomes.
-- Students are expected to research new/personally interesting aspects of nanoscience and present for discussion in class.

Course Policies:

- Attendance and class participation: Students are expected to attend all lectures, in-class quizzes and exams, laboratory tours and/or demonstrations.
- No make-up exams or quizzes. Under special circumstances, taking an exam at another time may be permitted, provided arrangements have been made with the instructor well in advance of the exam date. Exams missed due to illness require a physician's signed note for any considerations to be made. The final exam will be comprehensive with emphasis on lectures given after the mid-term exams.
- Incomplete work will be graded down based on the percentage completed by the student.

Academic honesty (plagiarism, etc.)
Academic honesty is very important. It is dishonest to cheat on exams, to copy term papers, to submit papers written by another person, to fake experimental results, or to copy or reword parts of books or articles into your own papers without appropriately citing the source. Students committing or aiding in any of these violations may be given failing grades for an assignment or for an entire course, at the discretion of the instructor. In addition to any academic action taken by an instructor, these violations are also subject to action under the University of Maine Student Conduct Code. The maximum possible sanction under the student conduct code is dismissal from the University.

Students with disabilities statement
If you have a disability for which you may be requesting an accommodation, please contact Ann Smith, Director of Disabilities Services, 121 East Annex, 581-2319, as early as possible in the term.

Sexual Discrimination Reporting:
The University of Maine is committed to making campus a safe place for students. Because of this commitment, if you tell a teacher about an experience of **sexual assault, sexual harassment, stalking, relationship abuse (dating violence and domestic violence), sexual misconduct or any form of gender discrimination** involving members of the campus, **your teacher is required to report** this information to the campus Office of Sexual Assault & Violence Prevention or the Office of Equal Opportunity.

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For *confidential resources off campus*: **Rape Response Services:**1-800-310-0000 or **Spruce Run**: 1-800-863-9909.

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Course Schedule

Week 1	Course Introduction, format and policies, Introduction to Nanoscience
Week 2	Scaling Principles
Week 3	Fractals
Week 4	Quantum Mechanics
Week 5	Statistical Mechanics
Week 6	Nanoparticles, Fullerenes, and Nanotubes
Week 7	Review and Midterm Exam
Week 8	Micro & Nano Fabrication Techniques and Principles
Week 9	Micro & Nano Fabrication Techniques and Principles
Week 10	Examples of Nanoscience & Technology Applications
Week 11	Nanoscale Characterization: SEM Techniques Take-Home Exam
Week 12	Nanoscale Characterization: APM Techniques
Week 13	(Dead Week) Nano Tools and Instruments: NanoRobotics & Review
	Final Exam

In the event of an extended disruption of normal classroom activities, the format for this course may be modified to enable its completion within its programmed time frame. In that event, students will be provided an addendum to the syllabus that will supersede this version.

THE UNIVERSITY OF MAINE

NEW COURSE PROPOSAL/MODIFICATION/ELIMINATION FORM FOR GRADUATE COURSES

GRADUATE PROGRAM/UNIT: School of Forest Resources

COURSE DESIGNATOR: SFR COURSE NUMBER: 544 EFFECTIVE SEMESTER: Fall 2015

COURSE TITLE: Forest Resources Economics

REQUESTED ACTION:

NOTE: A complete syllabus is required for all new courses and for the addition of an electronic learning component [1] to an existing course.

NEW COURSE (check all that apply and complete Section 1):

- [x] New Course
- [ ] New Course with Electronic Learning[1]
- [ ] Experimental

MODIFICATION (Check all that apply and complete Section 2):

- [ ] Designator Change
- [ ] Number Change
- [ ] Title Change
- [ ] Description Change
- [ ] Prerequisite Change
- [ ] Credit Change
- [ ] Cross Listing (must be at least 400-level) [2]
- [ ] Addition of Electronic Learning Component [1]
- [ ] Other (specify) _____

ELIMINATION:

- [ ] Course Elimination

ENDORSEMENTS (Print name)	Date	Sign Initials
Leader, Initiating Department/Unit(s) Michael E. Dacy	22 Dec 2014	
College(s) Curriculum Committee Chair(s) [if applicable]		
College Dean(s) Ellsworth	1-6-15	
Graduate School		

1. If a course involves significant electronic access for the primary delivery of its content (more than 50%), the course proposal should specify faculty training/experience in use of technology and how the electronic delivery will be managed. Please consult with the Office of Distance Education for more information.
2. Courses cross-listed below 400-level require the permission of the Graduate School.

SECTION 1 (FOR NEW COURSE PROPOSALS):

Proposed Catalog Description (include designator, number, title, prerequisites, credit hours):

SFR 544. Forest Economics. Economics of domestic and international forest resources production, processing and distribution. Contributions of forest resources to local, regional, and national economies. Fundamentals of financial analysis. Evaluation of priced and unpriced forest resources for acquisition, taxation, management, and disposal. Because of overlap, SFR 444 and SFR 544 cannot both be taken for degree credit.
Prerequisites: ECO 120.
Credits: 3

Components (type of course/used by Student Records for MaineStreet) – *Multiple selections are possible for courses with multiple non-graded components:*

- ☐ Applied Music
- ☐ Clinical
- ☐ Field Experience/Internship
- ☐ Research
- ☐ Studio
- ☐ Laboratory
- ☒ Lecture/Seminar
- ☐ Recitation
- ☐ Independent Study
- ☐ Thesis

Text(s) planned for use:

None

Course Instructor (include name, position, teaching load):

Dr. Mindy Crandall, Assistant Professor, 40% Teaching

Reason for new course:

This course will be crosslisted with SFR 444. It will provide a graduate-level version of forest economics that will be useful to graduate students without a traditional forestry background entering either the M.F., M.S., or Ph.D. programs within SFR.

Does the course addition require additional department or institutional facilities, support and/or resources, e.g. new lab facilities, computer support and services, staffing (including graduate teaching assistants), or library subscriptions and resources?

- ◉ No. The department will not request additional resources for this course.
- ○ Yes. Please list additional resources required and note how they will be funded or supported.

What other departments/programs are affected (e.g. course overlap, prerequisites)? Have affected departments/programs been consulted? Any concerns expressed? Please explain.

SFR faculty approval has been given. Other programs are not affected.

How often will this course be offered? Will offering this course result in overload salary payments, either through the college or CED, either to the instructor of this course or to anyone else as a result of rearranging teaching assignments?

SFR 444/544: Forest Economics **General Course Syllabus**
Offered every fall semester

Course description: Economics of domestic and international forest resources production, processing and distribution. Contributions of forest resources to local, regional, and national economies. Fundamentals of financial analysis. Evaluation of priced and unpriced forest resources for acquisition, taxation, management, and disposal.

Prerequisites: ECO 120 Microeconomics
Credits: 3 (3 hours of lecture/week), M/W/F 9:00 – 9:50

Faculty: Mindy Crandall, mindy.crandall@maine.edu
Office: 243 Nutting Hall (leave messages here)
Office Phone: 207.581.2855
Office hours: TBA

Textbook: None. Some readings are from Bettinger et al 2009 Forest Management and Planning, the text required for SFR 477.
Other materials: other assigned readings will be available on the network. You will need a calculator with X^Y functionality.

Course overview: Economics focuses on decision-making in a world of scarce resources and trade-offs between uses. This course considers the application of these economic concepts and methods to practical decisions that forest managers make regularly in their work. While the emphasis is on timber management, the concepts and methods can be applied more broadly to cases where the forest is managed for other marketable products (recreation, hunting access, water) or strictly for amenity values (scenic or aesthetic uses). The course includes optimal economic management of forests, market basics, wood products markets, regulations and taxation, techniques for measuring conservation values, and international and trade issues in forestry.

Course goals: SFR 444, SFR 477, and SFR 478 have integrated goals.
By the end of the semester, students will:

1. Know the essential ecological, economic, and social factors required to manage forests for multiple uses;
2. Understand the market context of optimal forest management;
3. Be familiar with tools essential for developing landscape level forest plans;
4. Have the knowledge required to be able to manage forests in the face of changing markets and policies in the future;
5. Understand the major decision criteria used in forest management;
6. Be able to communicate forest information and management objectives in a professional manner.

Learning outcomes for SFR 444/544

Upon successful completion of this class, students will: (1) understand a conceptual framework for thinking about problems of forest management and (2) become proficient in some practical analytical tools/skills that have proven useful to foresters making forest management decisions. Specifically, they will be able to:

- Describe the influence of forest products markets on management decisions
- Apply investment analysis to evaluate alternative land management regimes
- Explain issues related to discount rates, uncertainty, and risk
- Incorporate conservation values into forest management decisions
- Describe non-market valuation tools used for estimating conservation values
- Describe contextual economic issues managers face such as taxation, regulation, international trade, and certification.

Grading, SFR 444:

Exams and assignments are based on lectures and assigned readings.
Final grades will be based on the following assignments and breakdown:

Lecture assignments	% of grade
5 Assignments @ 20 points each	50
Midterm Exam, 50 points	25
Final Exam (comprehensive), 50 points	25

Grading, SFR 544:

Exams and assignments are based on lectures and assigned readings.
Final grades will be based on the following assignments and breakdown:

Lecture assignments	% of grade
5 Assignments @ 20 points each	40
Midterm Exam, 50 points	20
Research Paper, 30 points	12
In-Class presentation/lecture, 20 points	8
Final Exam (comprehensive), 50 points	20

Grades are assigned based on the percentage of accumulated points out of all possible points:

A	90-100%
B	80-90%
C	70-80%
D	60-70%
F	<60%

I reserve the right to adjust the grade threshold down. **No late assignments are accepted.** If you are absent, come see me and catch up with classmates. Alternative/make-up exams are given ONLY at the discretion of the instructor – with prior arrangement for extreme circumstances.

Expectations:
You are expected to follow the Professional Guidelines and Expectations for SFR Students. You can find it online at: http://forest.umaine.edu/files/2009/05/Professional-Guidelines-and-Expectations-for-School-of-Forest-Resources-Students-2013.pdf

Academic Honesty:
Academic honesty is very important. It is dishonest to cheat on exams, to copy term papers, to submit papers written by another person, to fake experimental results, or to copy or reword parts of books or articles into your own papers without appropriately citing the source. Students committing or aiding in any of these violations may be given failing grades for an assignment or for an entire course, at the discretion of the instructor. In addition to any academic action taken by an instructor, these violations are also subject to action under the University of Maine Student Conduct Code. The maximum possible sanction under the student conduct code is dismissal from the University.

Students with Disabilities:
If you have a disability for which you may be requesting an accommodation, please contact Ann Smith, Director of Disabilities Services, 121 East Annex, 581-2319, as early as possible in the term.

Sexual Discrimination Reporting:
The University of Maine is committed to making campus a safe place for students. Because of this commitment, if you tell a teacher about an experience of sexual assault, sexual harassment, stalking, relationship abuse (dating violence and domestic violence), sexual misconduct or any form of gender discrimination involving members of the campus, your teacher is required to report this information to the campus Office of Sexual Assault & Violence Prevention or the Office of Equal Opportunity.

If you want to talk in confidence to someone about an experience of sexual discrimination, please contact these resources:

For confidential resources on campus:
Counseling Center: 207-581-1392 or Cutler Health Center: at 207-581-4000.

For confidential resources off campus:
Rape Response Services: 1-800-310-0000 or Spruce Run: 1-800-863-9909.

Other resources: The resources listed below can offer support but may have to report the incident to others who can help:

For support services on campus: Office of Sexual Assault & Violence Prevention: 207-581-1406, Office of Community Standards: 207-581-1409, University of Maine Police: 207-581-4040 or 911. Or see the OSAVP website for a complete list of services at http://www.umaine.edu/osavp/

Extended Disruption:
In the event of an extended disruption of normal classroom activities, the format for this course may be modified to enable its completion within its programmed time frame. In that event, you will be provided an addendum to the syllabus that will supersede this version.

The course schedule may change to accommodate other schedule conflicts or needs.

Civility in the Classroom:
The goal of the University of Maine is to provide students with the knowledge, skills, and wisdom you need to contribute to society. My expectations are formulated to guarantee each student's freedom to learn and to protect the fundamental rights of others. People must treat each other with dignity and respect in order for scholarship to thrive. In this class, I expect students to follow a few simple courtesies that will help me teach in an atmosphere conducive to learning.

- **Come to class on time.** If you must be late, please enter as quietly as possible.
- **Come to class prepared.** Be ready to participate.
- **Do not disturb the class** by rustling papers, zipping backpacks, standing up, or leaving while lecture is going on or while students are raising questions for discussion.
- **Questions are encouraged at any time.** Give students who raise questions the courtesy of your attention. If your question requires a particularly lengthy answer, I may ask you to meet me after class.

Students with family or military responsibilities and those for whom English is not a primary language are invited to discuss their situations with me at the beginning of the term.

I am dedicated to establishing a learning environment that promotes diversity of race, cultures, genders, sexual orientations, learning styles, and physical abilities. If you notice discriminatory comments in this class, or if you feel discriminated against, please let me know. **Behaviors or language that create a hostile, offensive or intimidating environment will not be tolerated.**

General course outline: SFR 444/544

Wk	*Assignment*	*Topic*
1	Pre-course evaluation	Introduction to class, Importance of discounting *Wiesman 19xx, Sessions 19xx*
2		Investment criteria: Benefit/Cost ratio, IRR, NPV *Davis & Johnson Ch 7*
3	1: SEV	Optimal even-aged management economics *Sections from Bettinger Ch 2, Ch 5*
4		Optimal uneven-aged management economics *Davis & Johnson Ch 13*
5	2: NPV of harvest schedule	Economics of regulated forests, market basics *Bettinger Ch 10, Ch 11*
6		Wood products markets; supply and demand *Pearse Ch 8*
7	Midterm	Supply Chain Management; Midterm Exam *Bettinger Ch 14*
8	**544 only: Meet re: paper/lecture*	Regulations and taxation
9	3: Markets and types of goods	Externalities and types of goods
10		Measuring conservation values (travel cost, etc)
11	4: Optimal rotations with carbon	Ecosystem services, carbon markets
12		Optimal rotations with conservation values *Montgomery & Latta 2006*
13	5: Management with risk	Risk and uncertainty; TIMOs and REITs
14	**544 only: paper due*	Policy issues in forest economics *Bettinger Ch 15*
15	In-class: trade effects, post-course evaluation	International and trade issues; sustainability in a global context *Zhang 2007*
16	Final Exam	

Last day to withdraw and receive a W:

THE UNIVERSITY OF MAINE

NEW COURSE PROPOSAL/MODIFICATION/ELIMINATION FORM FOR GRADUATE COURSES

GRADUATE PROGRAM/UNIT: School of Forest Resources

COURSE DESIGNATOR: SFR COURSE NUMBER: 577 EFFECTIVE SEMESTER: Fall 2015

COURSE TITLE: Forest Landscape Management and Planning

REQUESTED ACTION:

NOTE: A complete syllabus is required for all new courses and for the addition of an electronic learning component [1] to an existing course.

NEW COURSE (check all that apply and complete Section 1):

- [x] New Course
- [ ] New Course with Electronic Learning[1]
- [ ] Experimental

MODIFICATION (Check all that apply and complete Section 2):

- [ ] Designator Change
- [ ] Number Change
- [ ] Title Change
- [ ] Description Change
- [ ] Prerequisite Change
- [ ] Credit Change
- [ ] Cross Listing (must be at least 400-level) [2]
- [ ] Addition of Electronic Learning Component [1]
- [ ] Other (specify) _____

ELIMINATION:

- [ ] Course Elimination

ENDORSEMENTS (Print name)	Date	Sign Initials
Leader, Initiating Department/Unit(s)		
Michael E. Day	22 Dec 2014	
College(s) Curriculum Committee Chair(s) [if applicable]		
College Dean(s)		
Edward W Ashworth	1-6-15	
Graduate School		

1. If a course involves significant electronic access for the primary delivery of its content (more than 50%), the course proposal should specify faculty training/experience in use of technology and how the electronic delivery will be managed. Please consult with the Office of Distance Education for more information.
2. Courses cross-listed below 400-level require the permission of the Graduate School.

SECTION 1 (FOR NEW COURSE PROPOSALS):

Proposed Catalog Description (include designator, number, title, prerequisites, credit hours):

SFR 577. Forest Landscape Management and Planning. Integration of biophysical and socioeconomic sciences for the multiple use management to achieve desired products, services and conditions of forest lands. Application of modern analytical procedures for strategic, tactical and operational forest planning up to the landscape level. Because of overlap, SFR 477 and SFR 577 cannot both be taken for degree credit.
Prerequisites: SFR 444 or SFR 544; SFR 409 or 349 or 509. All but SFR 349 can be taken as co-requisites.
Credits: 3

Components (type of course/used by Student Records for MaineStreet) – *Multiple selections are possible for courses with multiple non-graded components:*

- ☐ Applied Music
- ☐ Clinical
- ☐ Field Experience/Internship
- ☐ Research
- ☐ Studio
- ☐ Laboratory
- ☒ Lecture/Seminar
- ☐ Recitation
- ☐ Independent Study
- ☐ Thesis

Text(s) planned for use:

Bettinger et al. 2009. Forest Management and Planning. Academic Press, NY.

Course Instructor (include name, position, teaching load):

Dr. Mindy Crandall, Assistant Professor, 40% Teaching.

Reason for new course:

This course will be crosslisted with SFR 477. It will provide a graduate-level version of forest economics that will be useful to graduate students without a traditional forestry background entering either the M.F., M.S., or Ph.D. programs within SFR.

Does the course addition require additional department or institutional facilities, support and/or resources, e.g. new lab facilities, computer support and services, staffing (including graduate teaching assistants), or library subscriptions and resources?

- ◉ No. The department will not request additional resources for this course.
- ○ Yes. Please list additional resources required and note how they will be funded or supported.

What other departments/programs are affected (e.g. course overlap, prerequisites)? Have affected departments/programs been consulted? Any concerns expressed? Please explain.

SFR faculty approval has been given. Other programs are not affected.

How often will this course be offered? Will offering this course result in overload salary payments, either through the college or CED, either to the instructor of this course or to anyone else as a result of rearranging teaching assignments?

SFR 477/577: Forest Landscape Management and Planning **General Course Syllabus**
Offered every fall semester

Course description: Integration of biophysical and socioeconomic sciences for the multiple use management to achieve desired products, services and conditions of forest lands. Application of modern analytical procedures for strategic, tactical and operational forest planning up to the landscape level. Lec. 3.

Prerequisites: SFR 444 or SFR 544; SFR 409 or 349 or 509. All but SFR 349 can be taken as co-requisites.
Credits: 3 (3 hours of lecture/week), M/W/F 11:00 – 11:50

Faculty: Mindy Crandall, mindy.crandall@maine.edu
Office: 243 Nutting Hall (leave messages here)
Office Phone: 207.581.2855
Office hours: TBA

Required Textbook: Bettinger et al. 2009. Forest Management and Planning. Academic Press, NY. Other required readings will be available on the network.

Course overview: Forest management requires understanding the biological conditions, economic realities, and social frameworks that forest landscapes are managed within. Managers face multiple objectives and must articulate, quantify, and monitor provision of desired product and services in an uncertain environment. This course is the integration of biophysical and socioeconomic sciences for multiple use management to achieve desired products, services, and conditions of forestlands.

Course goals: SFR 444 and SFR 477 have integrated goals. By the end of the semester, students will know the essential ecological, economic, and social factors required to manage forests for multiple uses; understand the market context of optimal forest management; be familiar with tools essential for developing landscape level forest plans; have the knowledge required to be able to manage forests in the face of changing markets and policies in the future; understand the major decision criteria used in forest management; and be able to communicate forest information and management objectives in a professional manner.

Learning outcomes for SFR 477/577
Upon successful completion of this class, students will: (1) be familiar with the tools needed to manage and create a plan for a forest, including analytical procedures and hands-on practice and (2) develop a small plan in a thorough and professional manner.
Specifically, they will be able to:

- Describe the elements of planning including reasons for planning and key elements of a forest plan
- Articulate the information and data needed for forest planning

- Compare the strengths and limitations of tools used in forest assessment and planning
- Given a description of a problem, be able to: describe goals for a forest, establish criteria for meeting them, determine activities and decision variables, specify the objective function and constraints, apply a solution technique, and interpret the results
- Compare outcomes for multiple values under alternative management scenarios.
- Recognize how federal, state, and local laws and regulations govern the practice of forestry and forest operations.

Grading, SFR 477:
Final grades will be based on the following assignments and breakdown:

Lecture assignments:	
8 quizzes (drop the lowest score), 20 points each	70%
Final Exam, 60 points	30%

Grading, SFR 577:
Final grades will be based on the following assignments and breakdown:

Lecture assignments:	
8 quizzes (drop the lowest score), 20 points each	~58%
Research Paper, 20 points	~8%
Class presentation/lecture, 20 points	~8%
Final Exam, 60 points	~26%

Grades are assigned based on the percentage of accumulated points out of all possible points:

A	90-100%
B	80-90%
C	70-80%
D	60-70%
F	<60%

I reserve the right to adjust the grade threshold down. If you are absent, come see me and catch up with classmates. Quizzes will occur at the start of class. **In some cases quizzes will cover the reading assigned for that day.** No make-up quizzes are given. Bring calculators to class.

Expectations:
You are expected to follow the Professional Guidelines and Expectations for SFR Students. You can find it online at: http://forest.umaine.edu/files/2009/05/Professional-Guidelines-and-Expectations-for-School-of-Forest-Resources-Students-2013.pdf

Academic Honesty:
Academic honesty is very important. It is dishonest to cheat on exams, to copy term papers, to submit papers written by another person, to fake experimental results, or to copy or reword parts of books or articles into your own papers without appropriately citing the source.

Students committing or aiding in any of these violations may be given failing grades for an assignment or for an entire course, at the discretion of the instructor. In addition to any academic action taken by an instructor, these violations are also subject to action under the University of Maine Student Conduct Code. The maximum possible sanction under the student conduct code is dismissal from the University.

Students with Disabilities:
If you have a disability for which you may be requesting an accommodation, please contact Ann Smith, Director of Disabilities Services, 121 East Annex, 581-2319, as early as possible in the term.

Sexual Discrimination Reporting:
The University of Maine is committed to making campus a safe place for students. Because of this commitment, if you tell a teacher about an experience of sexual assault, sexual harassment, stalking, relationship abuse (dating violence and domestic violence), sexual misconduct or any form of gender discrimination involving members of the campus, your teacher is required to report this information to the campus Office of Sexual Assault & Violence Prevention or the Office of Equal Opportunity.

If you want to talk in confidence to someone about an experience of sexual discrimination, please contact these resources:

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http://www.umaine.edu/osavp/

Extended Disruption:
In the event of an extended disruption of normal classroom activities, the format for this course may be modified to enable its completion within its programmed time frame. In that event, you will be provided an addendum to the syllabus that will supersede this version.

The course schedule may change to accommodate other schedule conflicts or needs.

Civility in the Classroom:

The goal of the University of Maine is to provide students with the knowledge, skills, and wisdom you need to contribute to society. My expectations are formulated to guarantee each student's freedom to learn and to protect the fundamental rights of others. People must treat each other with dignity and respect in order for scholarship to thrive. In this class, I expect students to follow a few simple courtesies that will help me teach in an atmosphere conducive to learning.

- **Come to class on time.** If you must be late, please enter as quietly as possible.
- **Come to class prepared.** Be ready to participate.
- **Do not disturb the class** by rustling papers, zipping backpacks, standing up, or leaving while lecture is going on or while students are raising questions for discussion.
- **Questions are encouraged at any time.** Give students who raise questions the courtesy of your attention. If your question requires a particularly lengthy answer, I may ask you to meet me after class.

Students with family or military responsibilities and those for whom English is not a primary language are invited to discuss their situations with me at the beginning of the term.

I am dedicated to establishing a learning environment that promotes diversity of race, cultures, genders, sexual orientations, learning styles, and physical abilities. If you notice discriminatory comments in this class, or if you feel discriminated against, please let me know. **Behaviors or language that create a hostile, offensive or intimidating environment will not be tolerated.**

General course outline: SFR 477/577

Wk	*Assignment*	*Topic*
1	Pre-course evaluation	Introduction to class, forest management history *Bettinger, Chapter 1*
2	Quiz 1: stand dynamics	Stand dynamics *Bettinger, Chapter 4*
3		Growth and yield, models *USFS RPA 2010*
4	Q2: Growth and Yield	Optimizing Tree and Stand Objectives *Bettinger, Chapter 10*
5		Regulated forests and other landscape structures *Bettinger, Chapter 13*
6	Q3: SEV	Scaling up from forest landscape, Control techniques *Bettinger, Chapter 13*
7		Defining criteria and objectives
8	Q4: Forest Practices Act	Forest practices acts, policy and regulatory issues
9		Linear programming *Bettinger, Chapter 6, 7*
10	Q5: LP	Linear programming
11		Land classification and data needs in planning *Bettinger, Chapter 3*
12	Q6: Multiple-use Management	Managing for multiple values (wildlife, recreations, water)
13		Managing in the face of risk: windthrow, fire
14	Q7: Risk Management	Public Lands Management
15	Q8: Sustainability	Certification and sustainability *Bettinger, Chapter 15, 9*
16		Final Exam

Last day to withdraw and receive a W:

MAINE

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JAN 14 2015
GRADUATE SCHOOL

NEW COURSE PROPOSAL/MODIFICATION/ELIMINATION FORM FOR GRADUATE COURSES

GRADUATE PROGRAM/UNIT: Digital Curation Certificate

COURSE DESIGNATOR: DIG COURSE NUMBER: 580 EFFECTIVE SEMESTER: Summer 2015

COURSE TITLE: Digital Curation Internship

REQUESTED ACTION:

NOTE: A complete syllabus is required for all new courses and for the addition of an electronic learning component [1] to an existing course.

NEW COURSE (check all that apply and complete Section 1):

- ☐ New Course
- ☐ New Course with Electronic Learning [1]
- ☐ Experimental

MODIFICATION (Check all that apply and complete Section 2):

- ☐ Designator Change
- ☐ Number Change
- ☐ Title Change
- ☐ Description Change
- ☒ Prerequisite Change
- ☒ Credit Change
- ☐ Cross Listing (must be at least 400-level) [2]
- ☐ Addition of Electronic Learning Component [1]
- ☐ Other (specify) _____

ELIMINATION:

- ☐ Course Elimination

ENDORSEMENTS (Print name)	Date	Sign Initials
Leader, Initiating Department/Unit(s)		
Jon Ippolito	6 January 2015	
College(s) Curriculum Committee Chair(s) [if applicable]		
Laura Artesani	1/13/15	
College Dean(s)		
Emily Haddad Timothy M. Cole	1/13/15	
Graduate School		

1. If a course involves significant electronic access for the primary delivery of its content (more than 50%), the course proposal should specify faculty training/experience in use of technology and how the electronic delivery will be managed. Please consult with the Office of Distance Education for more information.
2. Courses cross-listed below 400-level require the permission of the Graduate School.

Proposed Catalog Description (include designator, number, title, prerequisites, credit hours):

Components (type of course/used by Student Records for MaineStreet) – *Multiple selections are possible for courses with multiple non-graded components:*

- ☐ Applied Music
- ☐ Clinical
- ☐ Field Experience/Internship
- ☐ Research
- ☐ Studio
- ☐ Laboratory
- ☐ Lecture/Seminar
- ☐ Recitation
- ☐ Independent Study
- ☐ Thesis

Text(s) planned for use:

Course Instructor (include name, position, teaching load):

Reason for new course:

Does the course addition require additional department or institutional facilities, support and/or resources, e.g. new lab facilities, computer support and services, staffing (including graduate teaching assistants), or library subscriptions and resources?

- ◯ No. The department will not request additional resources for this course.
- ◯ Yes. Please list additional resources required and note how they will be funded or supported.

What other departments/programs are affected (e.g. course overlap, prerequisites)? Have affected departments/programs been consulted? Any concerns expressed? Please explain.

How often will this course be offered? Will offering this course result in overload salary payments, either through the college or CED, either to the instructor of this course or to anyone else as a result of rearranging teaching assignments?

SECTION 2 (FOR COURSE MODIFICATIONS):

Current **catalog description (include designator, number, title, prerequisites, credit hours):**

DIG 580 Digital Curation Internships provide valuable experiential learning in an emerging and changing field that provides complex challenges. An internship experience is essential to the certificate program, providing students with current and vital knowledge and skills they will need in the workplace. Internships provide students opportunities to reinforce their academic learning, and provide opportunities to establish professional contacts. Because our digital curation curriculum is online, and because our students will be located in many different places, we offer two types of internships: place-based and virtual. prereq: Dig500, Dig510, 3 credits
• Place-based internships can be at an institution within or close to the University of Maine or near the location of the student's residence.

Proposed **catalog description (include designator, number, title, prerequisites, credit hours):**

DIG 580 Digital Curation Internships provide valuable experiential learning in an emerging and changing field that provides complex challenges. An internship experience is essential to the certificate program, providing students with current and vital knowledge and skills they will need in the workplace. Internships provide students opportunities to reinforce their academic learning, and provide opportunities to establish professional contacts. Because our digital curation curriculum is online, and because our students will be located in many different places, we offer two types of internships: place-based and virtual. prereq: Dig500, Dig510, 1-3 credits
• Place-based internships can be at an institution within or close to the University of Maine or near the location of the student's residence. Prerequisites: Permission

Reason **for course modification:**

The course was designed to allow for variable credit, depending on the number of hours the student works. See Syllabus.

SECTION 3 FOR COURSE ELIMINATIONS:

Reason for Elimination

THE UNIVERSITY OF MAINE

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NOV 03 2014
GRADUATE SCHOOL

NEW COURSE PROPOSAL/MODIFICATION/ELIMINATION FORM
for Graduate Courses

GRADUATE PROGRAM/UNIT Teacher and Counselor Education - Special Education

CURRENT COURSE DESIGNATOR SEI CURRENT COURSE NUMBER 501

EFFECTIVE SEMESTER Summer 2015

TITLE Diversity in Development in Childhood

REQUESTED ACTION:

NOTE: A complete syllabus is required for all new courses and for the addition of an electronic learning component [1] to an existing course.

NEW COURSE (check all that apply and complete Section 1):

- ☐ New Course
- ☐ New Course with Electronic Learning [1]
- ☐ Experimental

MODIFICATION (Check all that apply and complete Section 2):

- ☒ Designator Change
- ☒ Number Change
- ☒ Title Change
- ☒ Description Change
- ☒ Prerequisite Change
- ☐ Credit Change
- ☐ Cross Listing (must be at least 400-level) [2]
- ☐ Addition of Electronic Learning Component [1]
- ☐ Other (specify) _____

ELIMINATION:

- ☐ Course Elimination

ENDORSEMENTS (Print name)	Date	Sign Initials
Leader, Initiating Department/Unit(s) James Antecari James Antecari	10/29/14	
College(s) Curriculum Committee Chair(s) [if applicable] Mark Brooks-Fellows	10-22-14	OSCE
College Dean(s)	10/31/14	
Dean and Associate Provost for Graduate Studies		

1. If a course involves significant electronic access for the primary delivery of its content (more than 50%), the course proposal should specify faculty training/experience in use of technology and how the electronic delivery will be managed. Please consult with the Office of Distance Education for more information.
2. Courses cross-listed below 400-level require the permission of the Dean and Associate Provost for Graduate Education.

SECTION 1 (FOR NEW COURSE PROPOSALS):

Proposed Catalog Description (include designator, number, title, prerequisites, credit hours):

Components (type of course/used by Student Records for MaineStreet) – *Multiple selections are possible for courses with multiple non-graded components:*

- ☐ Applied Music
- ☐ Clinical
- ☐ Field Experience/Internship
- ☐ Research
- ☐ Studio
- ☐ Laboratory
- ☐ Lecture/Seminar
- ☐ Recitation
- ☐ Independent Study
- ☐ Thesis

Text(s) planned for use:

Course Instructor (include name, position, teaching load):

Reason for new course:

Does the course addition require additional department or institutional facilities, support and/or resources, e.g. new lab facilities, computer support and services, staffing (including graduate teaching assistants), or library subscriptions and resources?

- ○ No. The department will not request additional resources for this course.
- ○ Yes. Please list additional resources required and note how they will be funded or supported.

What other departments/programs are affected (e.g. course overlap, prerequisites)? Have affected departments/programs been consulted? Any concerns expressed? Please explain.

How often will this course be offered? Will offering this course result in overload salary payments, either through the college or CED, either to the instructor of this course or to anyone else as a result of rearranging teaching assignments?

SECTION 2 (FOR COURSE MODIFICATIONS):

Current catalog description (include designator, number, title, prerequisites, credit hours):

SEI 501 - Typical and Atypical Development in Infancy and Early Childhood
Examines theories and processes of development from pre-birth through age 5 and the impact of at-risk and disabling conditions on development emphasizing a multicultural perspective and an integrative view.
Credits: 3

Proposed catalog description (include designator, number, title, prerequisites, credit hours):

SED 505 - Diversity of Development in Childhood
Focuses on understanding development from infancy through childhood, including patterns for children who are at-risk or have disabling conditions. The impact of developmental challenges on the infant's and child's emerging capacities for engagement in relationships and learning is explored. The importance of the interaction of social, cultural, and interpersonal factors are stressed throughout. A major goal of the course is for students to gain a working knowledge of developmental processes that can be appliec assessment, curriculum development, and intervention planning and implementation.
Prerequisites & Notes
CHF 450, SED 302, SED 402, SED 500 or permission.
Credits: 3

Reason for course modification:

Update description to align with current research about child development. Course is a required prerequisite of all special education programs. Updated number change to reflect available numbers.

SECTION 3 FOR COURSE ELIMINATIONS:

Reason for Elimination

XXX 699

The course description remains the same, the new prerequisite should read:

A "Responsible Conduct of Research" course approved by the Office of Research and Sponsored Programs and the Graduate School (www.umaine.edu/graduate/responsible-conduct-research) is required before or concurrently with completion of 3rd XXX 699 credit. Permission

Credits: Ar

University of Maine Graduate School
Application Statistics as of February 16, 2015 by Residency

Fall 2014 - 1510 (includes Summer 2014)

In-State	Out-of-State	International	Total
387	582	326	1295

Fall 2015 - 1610 (includes Summer 2015)

In-State	Out-of-State	International	Total
359	739	396	1494

Fall 2014 - 1510 (includes Summer 2014)

Program	In-State	Out-of-State	International	Total
BUA	15	2	12	29
CSD	26	43	19	88
EDU	59	29	8	96
GPL	4	3	4	11
Total	**104**	**77**	**43**	**224**

Fall 2015 - 1610 (includes Summer 2015)

Program	In-State	Out-of-State	International	Total
BUA	15	18	44	77
CSD	41	168	27	236
EDU	43	72	21	136
GPL	9	30	23	62
Total	**108**	**288**	**115**	**511**

*NEBHE Residency included in In-State Totals

**Non-Degree statistics are included (summer applications to date)

2015 Graduate Strategic Plan

Planning Subcommittees:

Scope of the Graduate School's role and administrative functions

Enhancement, selective growth, and quality assurance of graduate programs
Co-chairs: Andy Knightly and John Daigle

Marketing and attracting graduate students
Chair: Pank Agrrawal

Financial sustainability
Chair: TBD

Graduate student life and professional development
Chair: Susan Bennett-Armistead

Interdisciplinary research and graduate programs
Chair: Owen Smith