

2014-2015 SHORT SIGNATURE SHEET



UNC CHARLOTTE

Date: 7/9/2014

Subject: Establish a new course: MEGR 3236

Originating Department: Mechanical Engineering and Engineering Science

TYPE OF PROPOSAL: UNDERGRADUATE GRADUATE UNDERGRADUATE & GRADUATE
 (Separate proposals sent to UCCC and Grad. Council)

DATE RECEIVED	DATE FORWARDED	COMMENTS: APPROVED, APPROVED WITH REVISIONS, ETC.	SIGNATURES
			PERSON ORIGINATING PROPOSAL <i>Kevin Lawton</i> [Kevin Lawton]
		Approved	DEPARTMENT CHAIR <i>[Signature]</i> [K. Scott Smith]
9/15/14	9/25/14	Approved	COLLEGE CURRICULUM COMMITTEE CHAIR <i>Mehdi Miri</i> [Wesley Williams]
9/25/14	9/25/14	Approved	COLLEGE DEAN <i>[Signature]</i> [print name here:]
		Approved	GENERAL EDUCATION (if applicable; for General Education courses only) [print name here:]
		Approved	HONORS COLLEGE (if applicable; for Honors courses & programs) [print name here:]
		Approved	UNDERGRADUATE COURSE & CURRICULUM COMMITTEE CHAIR (for undergraduate courses only)
		Approved	GRADUATE COUNCIL CHAIR (for graduate courses only)
			FACULTY GOVERNANCE ASSISTANT (received and processed in Academic Affairs)



UNC CHARLOTTE

SHORT FORM COURSE AND CURRICULUM PROPOSAL

*To: Kim Harris, Chair of the Undergraduate Course and Curriculum Committee

From: Kevin Lawton, Mechanical Engineering and Engineering Science

Date: July 9, 2014

Re: MEGR 3236 – new course in mechanical engineering

SUMMARY:

We wish to establish the new undergraduate course: MEGR 3236: Introduction to Nanoscale Science and Engineering. It has previously been taught as a MEGR 3090 special topics course for three times, and was well recognized by students. The course introduces students the contemporary knowledge of nanoscale science and engineering.

FOR CONSULTATION WITH OTHER DEPARTMENTS:

1. Does the proposed change affect other departments (including additions and/or changes to degree requirements or prerequisites offered in other departments)?
_____ Yes X No
2. If Yes, please list the other departments affected by the proposed change:
3. Have you consulted with each department listed in item 2 regarding the proposed change?
_____ Yes _____ No

Result(s) of Consultation(s) (please attach documentation):

4. For a new course or for major modification of an existing course, include Consultation on Library Holdings.
On 7/8/14, Jeff McAdams confirmed that the library holdings are adequate to support this course in nanoscale science and engineering.
5. For proposals involving Honors courses or programs, include written consultation with the Honors Council.

RESOURCES:

1. For a new course or revisions to an existing course, check all the statements that apply:
 This course will be cross listed with another course.
 There are prerequisites for this course.
 There are co-requisites for this course.
 This course is repeatable for credit.
 This course will affect the number of credits hours for its program.
 This proposal results in the deletion of an existing course(s) from the degree program and/or catalog.
 This proposal will alter an agreement with a North Carolina community college.

For all items checked above, applicable statements and content must be reflected in the proposed catalog copy.

2. Indicate the additional resources required, if any, to implement and maintain the proposed change.

CREDIT HOUR (Mandatory if new and/or revised course in proposal):

Review statement and check box once completed.

- The appropriate faculty committee has reviewed the course outline/syllabus and has determined that the assignments are sufficient to meet the University definition of a credit hour.

PROPOSED CATALOG COPY:

MEGR 3236: Introduction to Nanoscale Science and Engineering (3). This course introduces students to nanoscale science and engineering and includes the topics of: nano-manufacturing, nanomaterials and nanostructures, nanomechanics, experiments with nano-instruments, and related environmental issues. Prerequisites are: MEGR 3161 and MEGR 3171, both with a grade of C or above.

ACADEMIC PLAN OF STUDY (UNDERGRADUATE ONLY): Does the proposed change impact an existing Academic Plan of Study?

- Yes. If yes, please provide updated Academic Plan of Study in template format.
 No.

STUDENT LEARNING OUTCOMES (UNDERGRADUATE & GRADUATE): Does this course or curricular change require a change in SLOs or assessment for the degree program?

- Yes. If yes, please provide updated SLOs in template format.
 No.

TEXTBOOK COSTS: It is the policy of the Board of Governors to reduce textbook costs for students whenever possible. Have electronic textbooks, textbook rentals, or the buyback program been considered and adopted?

- Yes. Briefly explain below.
 No. Briefly explain below.

Due to its broad scope, no single available textbook covers the whole aspect of nanoscale science and engineering. A couple of books are identified as references and always reserved in the library for students to read. Lecture notes, associated reading materials such as journal review papers and detailed lab instruction documents serve as the main course material. They are posted on Moodle for students to use.

IMPORTANT NOTE: A Microsoft Word version of the final course and curriculum proposal should be sent to facultygovernance@uncc.edu upon approval by the Undergraduate Course and Curriculum Committee and/or Graduate Council chair.



J. Murrey Atkins Library

Consultation on Library Holdings

To: Kevin Lawton
From: Jeff McAdams
Date: 7/8/14
Subject: MEGR 3090 - Intro to Nanoscale Science and Engineering

Summary of Librarian's Evaluation of Holdings:

Evaluator: Jeff McAdams Date: 7/8/14

Check One:

- 1. Holdings are superior
2. Holdings are adequate (checked)
3. Holdings are adequate only if Dept. purchases additional items.
4. Holdings are inadequate

Comments:

Library holdings should be adequate to support student research for this course (see list of items held by subject heading below). Students will have access to relevant databases including Compendex, IEEE Xplore, Institute of Physics, Science Direct, and many others. If other materials are needed, students can obtain them quickly through our Interlibrary Loan services.

Table with 3 columns: LC Subject Heading, Books, Journals. Rows include Nanotechnology, Nanostructured Materials, Nanostructures, and Nanoscience.

Handwritten signature of Jeff McAdams

Evaluator's Signature

7/8/14

Date