



Academic Programs Committee of Council

University Course Challenge

Scheduled posting: September 2015

The following types of curricular and program changes are approved by the University Course Challenge -- additions and deletions of courses, lower levels of study and program options; straightforward program changes; and changes to courses which affect another college.

Contents include submissions from the following colleges:

Arts & Science, Engineering, and Graduate Studies & Research

Approval: Date of circulation: September 14, 2015
 Date of effective approval if no challenge received: September 30, 2015

Next scheduled posting:

The next scheduled Challenge document posting will be October 16, 2015, with a submission deadline of **October 14, 2015**. Urgent items can be posted on request.

Please direct challenges to both of the following: seanine.warrington@usask.ca in Registrarial Services and amanda.storey@usask.ca in the Office of the University Secretary.

University Course Challenge – September 2015

The curricular revisions listed below were approved through the Arts & Science College Course and Program Challenge and are now submitted to the University Course Challenge for approval.

DIVISION OF HUMANITIES AND FINE ARTS

French

Minor program revisions:

Bachelor of Arts Honours, Double Honours, Four-year, and Three-year, Minor, and Recognition in French

Delete FREN 128.3 from the program requirements and replace it with FREN 212.3.

[Bachelor of Arts Four-year \(B.A. Four-year\) - French](#)

[A2 Language Requirement \(9 credit units\)](#)

Students choosing Option 1 for Requirement A2 will continue in Option 1 for Requirement A6.

Students choosing Option 2 for Requirement A2 will continue in Option 2 for Requirement A6.

Option 1

- *No change*

Option 2

- ~~FREN 128.3~~ FREN 212.3
- [FREN 218.3](#)

Choose **3 credit units** from the following:

- *No change*

[Bachelor of Arts Three-year \(B.A. Three-year\) - French](#)

[A2 Language Requirement \(9 credit units\)](#)

Students choosing Option 1 for Requirement A2 will continue in Option 1 for Requirement A6.

Students choosing Option 2 for Requirement A2 will continue in Option 2 for Requirement A6.

Option 1

- *No change*

Option 2

- ~~FREN 128.3~~ FREN 212.3
- [FREN 218.3](#)

Choose **3 credit units** from the following:

- *No change*

[Bachelor of Arts Honours \(B.A. Honours\) - French](#)

A2 Language Requirement (9 credit units)

Students choosing Option 1 for Requirement A2 will continue in Option 1 for Requirement A6.
Students choosing Option 2 for Requirement A2 will continue in Option 2 for Requirement A6.

Option 1

- *No change*

Option 2

- ~~FREN 128.3~~ FREN 212.3
- [FREN 218.3](#)

Choose **3 credit units** from the following:

- *No change*

Bachelor of Arts Double Honours - French - Major 1

A2 Language Requirement (9 credit units)

Students choosing Option 1 for Requirement A2 will continue in Option 1 for Requirement A6.
Students choosing Option 2 for Requirement A2 will continue in Option 2 for Requirement A6.

Option 1

- *No change*

Option 2

- ~~FREN 128.3~~ FREN 212.3
- [FREN 218.3](#)

Choose **3 credit units** from the following:

- No change

Double Honours - French - Major 2

Option 2 (36 credit units)

- ~~FREN 128.3~~ FREN 212.3
- [FREN 218.3](#)
- [FREN 220.3](#)
- [FREN 230.3](#)

No further changes

Recognition in French Requirements (18 credit units)

Students with advanced standing who begin with ~~FREN 128~~ FREN 212 may receive Recognition after completion of 12 credit units of courses given in French. An average of at least 62.5% is required in courses used for Recognition.

- 18 credit units of courses taught in French (may include [FREN 103.3](#) and [FREN 106.3](#)).

Rationale: The Department of Languages, Literatures and Cultural Studies is streamlining the French language course offerings so that beginner grammar is taught at the 100-level, and students with advanced high-school study (immersion) will enter at the 200-level.

Course deletion:

FREN 128.3 Intermediate French for Bilingual and Immersion Students

The Department is streamlining French language offerings so that introductory grammar courses are taught at the 100-level, and bilingual students will enter at the 200-level. The department will ensure that the content of FREN 212 is appropriate for the successful entry of these students. This modification will allow the department to offer a wider variety of senior-level courses.

History

Minor program revisions:

Bachelor of Arts Honours, Double Honours, Four-year, and Three-year in History

Remove Temporal and Geographic breadth requirements, clarify use of CLAS, GRK and LATN courses to meet major requirements, and add in relevant classes from other subject areas.

Bachelor of Arts Four-year (B.A. Four-year) - History

A6 Major Requirement (36 credit units)

Students may count up to a total of 12 credit units of senior CLAS courses, 400-level GRK, and 400-level LATN in partial fulfillment of the Major Requirement.

Choose **6 credit units** from the following:

- [300-Level HIST Courses](#)

Choose **6 credit units** from the following:

- [400-Level HIST Courses](#)

Choose **24 credit units** from the following:

- [200-Level, 300-Level, 400-Level HIST Courses](#)
- [200-Level, 300-Level, 400-Level CLAS Courses](#)
- [100-Level, 200-Level, 300-Level, 400-Level CMRS Courses](#)
- [400-Level GRK Courses](#)
- [400-Level LATN Courses](#)
- [NRTH 321.3](#)
- [PHIL 212.3](#)
- [INCC 310.3](#)

Temporal Requirements (12 credit units)

~~The same senior level course may be used to meet both Temporal and Geographical requirements. No more than 12 credit units senior CLAS courses may be used to meet Major Requirements.~~

~~Choose **6 credit units** from each of the following two temporal periods:~~

~~End Date of 1815 or Earlier~~

~~Start Date of 1815 or Later~~

Geographical Requirement (12 credit units)

~~The same senior level course may be used to meet both Temporal and Geographical requirements. No more than 12 credit units senior CLAS courses may be used to meet Major Requirements.~~

~~Choose 6 credit units from two of the following geographical areas:~~

~~North America~~

~~Europe & Great Britain~~

~~Other Regions~~

Bachelor of Arts Three-year (B.A. Three-year) - History

A6 Major Requirement (24 credit units)

Students may count up to a total of 9 credit units of senior CLAS courses, 400-level GRK, and 400-level LATN in partial fulfillment of the Major Requirement.

Choose **6 credit units** from the following:

- [300-Level HIST Courses](#)
- [400-Level HIST Courses](#)

Choose **24 credit units** from the following:

- [200-Level, 300-Level, 400-Level HIST Courses](#)
- [200-Level, 300-Level, 400-Level CLAS Courses](#)
- [100-Level, 200-Level, 300-Level, 400-Level CMRS Courses](#)
- [400-Level GRK Courses](#)
- [400-Level LATN Courses](#)
- [NRTH 321.3](#)
- [PHIL 212.3](#)
- [INCC 310.3](#)

Temporal Requirement (12 credit units)

~~The same senior level course may be used to meet both Temporal and Geographical requirements. No more than 12 credit units senior CLAS courses may be used to meet Major Requirements.~~

~~Choose 6 credit units from each of the following two temporal periods:~~

~~[End Date of 1815 or Earlier](#)~~

~~[Start Date of 1815 or Later](#)~~

Geographical Requirement (12 credit unit)

~~The same senior level course may be used to meet both Temporal and Geographical requirements. No more than 12 credit units senior CLAS courses may be used to meet Major Requirements.~~

~~Choose 6 credit units from two of the following geographical areas:~~

~~[North America](#)~~

~~[Europe & Great Britain](#)~~

~~[Other Regions](#)~~

Bachelor of Arts Honours (B.A. Honours) - History

A6 Major Requirement (54 credit units)

Students may count up to a total of 12 credit units of senior CLAS courses, 400-level GRK, and 400-level LATN in partial fulfillment of the Major Requirement.

- [HIST 397.3](#)
- [HIST 494.0](#)

Choose **9 credit units** from the following:

- [300-Level HIST Courses](#)

Choose **12 credit units** from the following:

- [400-Level HIST Courses](#)

Choose **30 credit units** from the following:

- [200-Level, 300-Level, 400-Level HIST Courses](#)
- [200-Level, 300-Level, 400-Level CLAS Courses](#)
- [100-Level, 200-Level, 300-Level, 400-Level CMRS Courses](#)
- [400-Level GRK Courses](#)
- [400-Level LATN Courses](#)
- [NRTH 321.3](#)
- [PHIL 212.3](#)
- [INCC 310.3](#)

Choose **6 credit units** from the following:

~~No more than 12 credit units senior CLAS courses may be used to meet Major Requirements.~~

- ~~200-Level, 300-Level, 400-Level HIST Courses~~
- ~~CMRS 110.3~~
- ~~CMRS 111.3~~
- ~~CMRS 401.3~~
- ~~CMRS 402.3~~
- ~~NRTH 321.3~~
- ~~PHIL 212.3~~
- ~~CLAS 220.3~~
- ~~CLAS 225.3~~
- ~~CLAS 227.3~~
- ~~CLAS 228.3~~
- ~~CLAS 240.3~~
- ~~CLAS 242.3~~
- ~~CLAS 247.3~~
- ~~CLAS 248.3~~
- ~~CLAS 252.3~~
- ~~CLAS 259.3~~
- ~~CLAS 356.3~~
- ~~CLAS 357.3~~

Temporal Requirement (12 credit units)

~~The same senior level course may be used to meet both Temporal and Geographical requirements. No more than 12 credit units senior CLAS courses may be used to meet Major Requirements.~~

~~Choose **6 credit units** from each of the following two temporal periods:~~

~~End Date of 1815 or Earlier~~

~~Start Date of 1815 or Later~~

Geographical Requirement (12 credit units)

~~The same senior level course may be used to meet both Temporal and Geographical requirements. No more than 12 credit units senior CLAS courses may be used to meet Major Requirements.~~

~~Choose **6 credit units** from each of two of the following areas:~~

~~North America~~

~~Europe & Great Britain~~

~~Other Regions~~

Bachelor of Arts Double Honours - History - Major 1

Double Honours Programs may be taken in combinations of two subjects. In this program at least 36 credit units will normally be taken in each subject. For further details, please see the [Academic Information and Policies](#) section.

~~A maximum of 12 credit units of senior Classics or Classical, Medieval & Renaissance Studies courses are allowed (except CLAS 343.3). Only 400-level LATN and GRK courses may be counted toward the program requirements.~~

A6 Major Requirement (30 credit units)

~~Students may count up to a total of 12 credit units of senior CLAS courses, 400-level GRK, and 400-level LATN in partial fulfillment of the Major Requirement.~~

- [HIST 397.3](#)
- [HIST 494.0](#)

~~Choose **27 credit units** from the following, such that at least 3 credit units are at the 300-level and 6 credit units are at the 400-level:~~

- ~~[200-Level, 300-Level, 400-Level HIST Courses](#)~~
- ~~[200-Level, 300-Level, 400-Level CLAS Courses](#)~~
- ~~[100-Level, 200-Level, 300-Level, 400-Level CMRS Courses](#)~~
- ~~[400-Level GRK Courses](#)~~
- ~~[400-Level LATN Courses](#)~~
- ~~[NRTH 321.3](#)~~
- ~~[PHIL 212.3](#)~~
- ~~[INCC 310.3](#)~~

~~Choose **27 credit units** from senior-level HIST, CLAS, CMRS and/or 400-level GRK or LATN such that:~~

- ~~At least 3 credit units are at the 300-level~~
- ~~At least 6 credit units are at the 400-level~~

Temporal Requirements

~~Choose **at least 6 credit units** from the following:~~

~~End Date of 1815 or Earlier~~

~~Choose **at least 6 credit units** from the following:~~

~~Start Date of 1815 or Later~~

Geographical Requirement

~~Choose at least 6 credit units from each of two of the three Geographic regions:~~

~~North America~~

~~Europe & Great Britain~~

~~Other Regions~~

~~Notes:~~

~~1) The same senior level course may be used to meet more than one requirement (for example HIST 402.3 will count toward the requirement for 400-level courses, toward the "End Date of 1815 or Earlier" Temporal requirement, and toward the "Europe and Great Britain" Geographical requirement).~~

~~2) No more than 12 credit units of courses in CLAS or CMRS (combined) may be used to meet the program requirements.~~

Double Honours - History - Major 2

Double Honours Programs may be taken in combinations of two subjects. In this program at least 36 credit units will normally be taken in each subject. For further details, please see the [Academic Information and Policies](#) section.

~~A maximum of 12 credit units of senior Classics or Classical, Medieval & Renaissance Studies courses are allowed (except CLAS 343.3). Only 400-level LATN and GRK courses may be counted toward the program requirements.~~

Of the requirements listed in Major 2, some courses (usually 6 credit units) may be used to fulfill Requirements 1 to 5 of Major 1. If this happens, the result will be that the number of Open Electives in Requirement 7 will be increased accordingly to continue to require a total of 120 credit units for the Double Honours degree.

The major average for History as Major 2 will be calculated using the grades earned in all HIST and all courses listed in the program requirements.

Students must complete at least two-thirds of the Major 2 program requirements (to the nearest highest multiple of 3 credit units) from the University of Saskatchewan to meet the mandatory residency requirement.

Requirements (42 credit units)

- [HIST 397.3](#)
- [HIST 494.0](#)

Choose **6 credit units** from the following:

- [100-Level HIST Courses](#)

Choose **6 credit units** from the following:

- *No change to list of language courses*

Any senior-level language course provided that the prerequisite is met

Choose **27 credit units** from the following, such that at least 3 credit units are at the 300-level and 6 credit units are at the 400-level:

- [200-Level, 300-Level, 400-Level HIST Courses](#)
- [200-Level, 300-Level, 400-Level CLAS Courses](#)
- [100-Level, 200-Level, 300-Level, 400-Level CMRS Courses](#)
- [400-Level GRK Courses](#)
- [400-Level LATN Courses](#)
- [NRTH 321.3](#)
- [PHIL 212.3](#)
- [INCC 310.3](#)

~~Choose 27 credit units from senior-level HIST, CLAS, CMRS and/or 400-level GRK or LATN such that:~~

- ~~• At least 3 credit units are at the 300-level~~
- ~~• At least 6 credit units are at the 400-level~~

~~Temporal Requirements~~

~~Choose 6 credit units from the following:~~

~~End Date of 1815 or Earlier~~

Choose 6 credit units from the following:
Start Date of 1815 or Later
Geographical Requirements

~~Choose at least 6 credit units from each of two of the following areas:~~

~~North America
Europe & Great Britain
Other Regions~~

~~Notes:~~

~~1) The same senior level course may be used to meet more than one requirement (for example HIST 402.3 will count toward the requirement for 400-level courses, toward the "End Date of 1815 or Earlier" Temporal requirement, and toward the "Europe and Great Britain" Geographical requirement).
2) No more than 12 credit units of courses in CLAS or CMRS (combined) may be used to meet the program requirements.~~

History - Minor

The minor in History may be completed in conjunction with any degree in another discipline in the College of Arts & Science.

The Minor average in History will be calculated using the grades earned in all courses eligible to be included in the Minor program requirements. Students must complete at least two-thirds of the program requirements (rounded to the nearest highest multiple of 3 credit units) using courses offered by the University of Saskatchewan to meet the Residency requirement.

Requirements (24 credit units)

Choose **6 credit units** from the following:

- 100-Level HIST Courses

Choose **18 credit units** from the following:

Students are encouraged to take 6 credit units at the 300-level with a view to strengthening their research, writing, and oral skills.

- 200-Level, 300-Level, 400-Level HIST Courses
- 200-Level, 300-Level, 400-Level CLAS Courses
- 100-Level, 200-Level, 300-Level, 400-Level CMRS Courses
- 400-Level GRK Courses
- 400-Level LATN Courses
- NRTH 321.3
- PHIL 212.3
- INCC 310.3

~~Choose 18 credit units of senior history of which students are advised (though not required) to take 6 credit units at the 300-level with a view to strengthening their research, writing, and oral skills.~~

~~Temporal Requirements~~

~~The same senior level course may be used to meet both Temporal and Geographical requirements.~~

~~Choose 6 credit units from each of the following two temporal periods:~~

~~End Date of 1815 or Earlier~~

~~Start Date of 1815 or Later~~

~~Geographical Requirements~~

~~-~~

~~The same senior level course may be used to meet both Temporal and Geographical requirements.
Choose 6 credit units from each of two of the following areas:~~

~~North America~~
~~Europe & Great Britain~~
~~Other Regions~~

If you require further assistance, please contact the Arts & Science Undergraduate Student Office.

Rationale: The geographic and temporal requirements reflect an older view of the divisions of the discipline into temporal and geographic units. For a variety of reasons this no longer reflects the Department of History's approach to teaching history. In particular, a significant number of our courses are thematically or methodologically focused rather than temporally or geographically limited. Course from other subject areas are incorporated as appropriate to the theory and practice of the discipline of History.

Music

New course:

MUS 125.1 In the Company of Music

"In the Company of Music" explores music's ability--heuristically--to garner restorative if not healing powers. The course concentrates upon three familiar stages of the journey from fledgling musician to practicing artist, and offers coping strategies in a vocation rife with the unexpected. Struggles and rewards are the things of life, but it is not often that such realities, as they relate to music as a vocation, are brought into focus in the context of a course, a lacuna that MUS 125 addresses head on. The course is divided into three units. Unit one, "music as healer," examines how deep artistic connection with the creative and the performative aspects of music contributes to self-awareness and self-confidence. Unit two, "engagement as commodity," treats of balancing the twinned concerns of music as art, and music as business. Unit three, "the new norm," grapples with the impact of technological advances that constantly outstrip an artist's ability to keep abreast of them.

Note: Students in the Bachelor of Music in Music Education programs cannot count this course within their program requirements.

Instructor(s): Susan Aglukark, O.C. (2016), future visiting music specialists, faculty

Rationale: Universities offer exceptional training leading to degrees in music, degrees that are predicated upon the acquisition of historical, theoretical, and practical skills whose intersection often leads to career paths that are the natural consequence of all that is embedded in a degree program itself. Rarely, however, are students presented with the opportunity to reflect directly on the broader arch of the personal journey that a life in music entails. And the reason is simple: in the university setting that life is only beginning to unfold. MUS 125, "In the Company of Music," presents students at the U of S with the unique opportunity to imagine such a lifecycle under the careful guidance of Susan Aglukark, celebrated Inuk musician, multiple Juno award winner, and member of the Order of Canada. The course will enable students to understand just how fluid the career of an artist must be, and will foster healthy approaches to self-criticism, while examining the journey leading toward a life in music. Foundational concerns such as the role played by ideals, openness to surprise, and collaborative engagement with others emerge in course units given over to "music as healer," "engagement as commodity," and "the new norm." Thinking deeply about one's own connection to music is focal in each of the three course units, and is as impacted by intensely personal matters (as when one reflects on how music helps to shape a worldview) as it is by external matters (such as coming to terms with the commodification of a career in music, or coping with constant advances in technology). While the course has defined goals appropriate to its one credit-unit weighting (see the accompanying syllabus), the broader purpose of "In the Company of Music," is to establish the frames of reference for returning to the weighty matters associated with the course in healthy ways as one's career continues to unfold.

The Department imagines that this course will be offered more than once, by future visiting professionals /scholars.

DIVISION OF SCIENCE

Geology

Minor program revisions:

Bachelor of Science Honours and Four-year in Geology

Remove PHYS 155.3 as an option in the “Required Cognate Courses” in Requirement C7.

C7 Electives Requirement (24 credit units)

Required Cognate Courses

Note: Students should be aware that STAT 244 does not meet APEGS requirements.

Choose **9 credit units** from the following:

- [BIOL 120.3](#)
- [BIOL 121.3](#)
- Any senior BIOL course as long as the prerequisites are met. If the student desires to satisfy APEGS requirements, only 6 credit units of BIOL courses may be taken as part of the required cognate courses.
- [BMSC 200.3](#)
- Any senior CHEM course as long as the prerequisites are met. If the student desires to satisfy APEGS requirements, only 6 credit units of CHEM courses may be taken as part of the required cognate courses.
- [CMPT 111.3](#) or [CMPT 113.3](#) or [CMPT 116.3](#)
- [CMPT 115.3](#) or [CMPT 117.3](#)
- Any senior CMPT course as long as the prerequisites are met. If the student desires to satisfy APEGS requirements, only 6 credit units of CMPT courses may be taken as part of the required cognate courses.
- Any senior MATH course as long as the prerequisites are met. If the student desires to satisfy APEGS requirements, only 6 credit units of MATH courses may be taken as part of the required cognate courses.
- ~~[PHYS 155.3](#)~~
- Any senior PHYS course as long as the prerequisites are met. If the student desires to satisfy APEGS requirements, only 6 credit units of PHYS courses may be taken as part of the required cognate courses.
- [STAT 241.3](#)
- [STAT 242.3](#) or [STAT 245.3](#) or [STAT 246.3](#) or [PLSC 214.3](#)
- Any senior STAT course as long as the prerequisites are met. If the student desires to satisfy APEGS requirements, only 6 credit units of STAT courses may be taken as part of the required cognate courses.

Open Electives (15 credit units)

Arts and Science courses, or those from other Colleges that have been approved for Arts and Science credit, to complete the requirements for 120 credit unit Four-year program, of which at least 66 must be at the 200-level or higher

Rationale: Students in the BSc Honours or Four-year programs in Geology are required to take PHYS 115.3, which is now “mutually exclusive” with PHYS 155.3, and therefore can no longer have credit for both. Removal of this course from the list will prevent students from assuming that they may receive credit for both.

Minor course revision(s):

GEOL 229.3 Introductory Geochemistry

Prerequisite change:

Old prerequisite(s): GEOL 121 and CHEM 112; Prerequisite or Co-requisite: Math 110

New prerequisite(s): GEOL 121; and CHEM 112; and MATH 110 or MATH 123

Rationale: This change brings GEOL 229 into conformity with the math prerequisite in the other 200 level GEOL classes.

Items for Information

The curricular revisions listed below were approved through the Arts & Science College Course and Program Challenge and are now submitted to the University Course Challenge for information.

DIVISION OF HUMANITIES AND FINE ARTS

Classics

Minor course revision(s):

CLAS 220.3 Daily Life in Ancient Greece and Rome

Prerequisite Change:

Old prerequisite(s): 6 credit units from: ARCH 116; CLAS 110, 111; HIST 110; or the permission of the instructor.

New prerequisite(s): 3 credit units from: ARCH; CLAS; CMRS; HIST; and 30 credit units at the university.

Rationale: This class is being revitalized after a number of years of not being offered. This change to the prerequisite aligns with the current standard for 200-level HIST courses which are under the same departmental academic authority, and it is felt that 2nd-year students with at least 3 credit units of previous learning in this or a related area will be able to be successful in this course.

Drama

Minor course revision(s):

DRAM 419.3 Acting VIII

Prerequisite Change:

Old prerequisite(s): DRAM 416 or 418

New prerequisite(s): DRAM 317 or 319

Rationale: In the past, DRAM 418 was taught in Term 1 and DRAM 419 in Term 2, and the old prerequisite simply reflected that practice. Going forward, the Department wants the flexibility to offer either course in either term. The prerequisite change ensures that students will still be able to complete both classes during one regular session. Ultimately the content of 419 does not depend upon prior knowledge of the content of 418. Both of these classes can be taken by a student who has completed the 300-level acting classes.

INTEROFFICE MEMORANDUM

TO: MS. SEANINE WARRINGTON
COORDINATOR OF ACADEMIC PROGRAMS & CATALOGUE, SESD

FROM: MR. CHRISTOPHER MARTIN
ACADEMIC PROGRAMS COORDINATOR, COLLEGE OF ENGINEERING

SUBJECT: UNIVERSITY COURSE CHALLENGE – SEPTEMBER 2015

DATE: SEPTEMBER 8, 2015

CC: DR. BRUCE SPARLING
INTERIM ASSOCIATE DEAN ACADEMIC, COLLEGE OF ENGINEERING

Ms. Seanine Warrington:

On behalf of the College of Engineering, I am writing to inform you that the attached curricular revisions were approved by our college-level Undergraduate Academic Programs Committee and are now submitted to the University Course Challenge for review and approval.

Should any members of the university community have any questions or concerns regarding the proposed changes, please do not hesitate to redirect such inquiries to me directly.

Sincerely,

Christopher Martin, B.B.A.
Academic Programs Coordinator
College of Engineering
Phone: (306) 966-3201

UNIVERSITY COURSE CHALLENGE – APPROVAL REQUIRED

DEPARTMENT OF MECHANICAL ENGINEERING

Type of Change:	PREREQUISITE CHANGE
Course In Question:	ME 352.3 Engineering Analysis III
Original Prerequisite:	ME 226 and ME 251 and MATH 224
Proposed Prerequisite:	ME 226 and ME 251 (taken) and MATH 224 (taken)
Rationale for Change:	An administrative change required for the Mechanical Engineering program. Approved in June 2015.

Type of Change:	PREREQUISITE CHANGE
Course In Question:	ME 314.3 Machine Design
Original Prerequisite:	ME 313 (taken) or BLE 324 (may be taken concurrently) and ME 226 and ME 251 and ME 324 (taken) and MATH 224
Proposed Prerequisite:	ME 313 (taken), ME 226, ME 251 (taken), ME 324 (taken), and MATH 224 (taken).
Rationale for Change:	An administrative change required for the Mechanical Engineering program. Approved in June 2015.

College of Graduate Studies and Research (CGSR)

The curricular changes listed below have been approved through CGSR governance and are submitted to the University Course Challenge.

University Course Challenge – September 2015

Course changes for information:

INDG 802.3: Applied Native Studies Research Methods and **ERES 810.3:** Indigenous Research Epistemology and Methods are being made equivalent because they contain significant overlapping content.

EE 840.3 — 1/2(3L-3P)

Mathematical Methods in Engineering

Iterative techniques for solving non-linear equations with one variable; techniques for solving sets of linear algebraic equations using direct and iterative methods; Iterative methods for solving non-linear algebraic equations; LU factorization and application of LU matrices; eigenvalues, eigenvectors and modal transformation, solving sets of first- and second-order differential equations; optimization techniques, numerical solutions of partial differential equations-

EE 820.3 — 1/2(3L)

Electrical Materials Science

Review of general solid state physics ~~for electrical engineers.~~ Structures and properties of materials. An introduction to Wave-Mechanics. Band theory of ~~solids,~~ metals, semiconductors and insulators. The modern theory of solids. Electrical conduction in solids. Phonons, heat capacity and thermal conductivity. Properties of intrinsic and extrinsic semiconductors. ~~Structure and properties of materials.~~

EE 829.3 — 1/2(3L)

Selected Topics from ~~Optical Electronics~~ Optoelectronics and Photonics and Imaging Science

~~Basic theory emphasizing on relationships between electronic structure and optical properties of solids. Einstein A and B coefficients for stimulated emission. Gas lasers. Solid state lasers. Photodetectors. Basic concepts in optical imaging. Diffraction. Holography.~~ Wave nature of light. Diffraction phenomena and gratings. Interference and interferometers. Basic theory of optical properties of solids, thin films and multilayer structures. Optical waveguides and optical fibers. Einstein A and B coefficients for stimulated emission. Gas lasers. Solid state lasers. Photodetectors. Polarization and modulation of light Birefringence. Electro-optic effects.