

## Missouri University of Science and Technology

Formerly University of Missouri-Rolla

Minutes of the Campus Curricula Committee Meeting April 1, 2020 8:15am, Virtual Zoom (For Faculty Senate Meeting of April 16, 2020)

**Attendees:** Steve Raper, Petra Dewitt, Katie Shannon, Matt Insall, Cecil Eng Huang Chua, Michael Davis, Kyle Perry, Kristy Giacomelli-Feys and Marita Tibbetts

The following curriculum forms were discussed and approved:

#### **Course Change Forms:**

se Change Forms:	
File 4413.5	CER ENG 4410: Introduction to Integrated Computational Materials Engineering
File 2048.1	CHEM ENG 5305: Hazardous Materials Management
File 475.4	COMP ENG 3110: Computer Organization and Design
File 1353.2	COMP ENG 5110: Principles of Computer Architecture
File 848.3	COMP ENG 6110: Advanced Computer Architecture I
File 2051.7	COMP ENG 6220: Design Automation of VLSI Systems
File 1662.1	ENG MGT 6112: Leadership for Engineers
File 1250.3	GEO ENG 5331: Subsurface Hydrology
File 1052.5	GEO ENG 5381: Intermediate Subsurface Hydrology And Contaminant Transport Mechs
File 2063.1	GEOLOGY 4411: Hydrogeology
File 1532.4	MIL AIR 1110: Air Force Heritage and Values I
File 1390.3	MIL AIR 1120: Air Force Heritage and Values II
File 418.4	MIL AIR 2110: Team and Leadership Fundamentals I
File 1092.4	MIL AIR 2120: Team and Leadership Fundamentals II
File 419.3	MIL AIR 3110: Leading People & Effective Communication I
File 1093.3	MIL AIR 3120: Leading People & Effective Communication II
File 420.3	MIL AIR 4110: National Security, Leadership Responsibilities & Commissioning
	Preparation I
File 748.3	MIL AIR 4120: : National Security, Leadership Responsibilities & Commissioning
	Preparation II
File: 751.5	MIL ARMY 1250: Leadership and Personal Development
File: 421.5	MIL ARMY 1500: Introduction to Tactical Leadership
File 1734.4	MIL ARMY 2250: Innovative Team Leadership
File 1395.3	MIL ARMY 2500: Foundations of Tactical Leadership
File 1956.1	MIL ARMY 2750: Basic Leadership Laboratory
File 916.4	MUSIC 1130: Wind Symphony
File 4293.4	MUSIC 1131: Marching Band
File 1780.1	MUSIC 1132: University Orchestra



## Missouri University of Science and Technology

Formerly University of Missouri-Rolla

**Certificate Forms:** 

File: 349 PROPOSED: BioInnovation CTU

**Degree Change Forms:** 

File 147.17 BIO SCI-BS: Biological Sciences BS File 123.6 PRE-MED-MI: Pre-Medicine Minor

File: 135.13 TCH COM-MS: Technical Communications MS

**Experimental Course forms:** 

File: 4689 BIO SCI 4001.007: Freshwater Ecology Laboratory

File 4687 CHEM ENG 5001.011: Chemical Engineering Instrumentation using Microcontrollers

File 4688 CHEM ENG 5001.012: Senior Assessment Review

File 4697 COMP ENG 6001.001: Adaptive Resonance Theory and Applications
File: 4692 ELEC ENG 5001.007: Process Control System Safety, Security and Alarms

#### **New Business:**

Grad Track information was brought up to the committee regarding the committee's response to the need of the committee's vote and approval. Item will be brought to Faculty Senate outside of this committee and we will move forward based on that decision.

The meeting adjourned at 9:00am.

Steph a. Repen

Stephen A. Raper, Chair

Missouri S&T Campus Curricula Committee

Date Submitted: 03/05/20 2:05 pm

**Viewing: CER ENG 4410: Introduction to** 

# Integrated Computational Materials Engineering

File: 4413.5

Last approved: 06/26/17 3:15 am

Last edit: 03/05/20 2:05 pm Changes proposed by: smiller

Programs referencing this

course

CR ENG-BS: Ceramic Engineering BS

Requested Fall 2020 08/14/2017

**Effective Change** 

Date

Department

Materials Science & Engineering

Discipline

Ceramic Engineering (CER ENG)

Course Number 4410

Title

#### In Workflow

- 1. RMATSENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

#### **Approval Path**

1. 03/05/20 3:38 pm

Greg Hilmas

(ghilmas):

Approved for

**RMATSENG Chair** 

2. 03/05/20 4:22 pm Kristy Giacomelli-

Feys (kristyg):

Approved for CCC
Secretary
03/12/20 12:16
pm
Stephen Raper
(sraper):
Approved for
Engineering DSCC
Chair
03/12/20 12:55
pm Kristy Ciasamalli
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
04/02/20 9:06 am
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Meeting Agenda
04/02/20 10:08
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

## History

Jun 26, 2017 by F.
 Scott Miller
 (smiller)

Introduction to Integrated Computational Materials Engineering

Abbreviated

Intro to ICME

Course Title

Catalog

Description

This course will provide an introduction to different computational tools for studying materials at different length scales. Several atomistic, microscale, and continuum models will be introduced and bridging between different modeling scales will be discussed. This course has a computational laboratory to build models and run simulations.

Prerequisites

A grade of "C" or better in both Cer Eng **3230** <del>3220</del> and Math 3304, and in either Cer Eng 2110 or Met Eng 2110.

Field Trip

Statement

**Credit Hours** 

LEC: 2

LAB: 1

IND: 0

RSD: 0

Total: 3

Required for

Yes

Majors

Elective for

No

Majors

Justification for

change:

Typo in Prerequisites, should state Cer Eng 3230, not 3220.

Semesters

previously

offered as an

experimental

course

Spring semester of 2013, 2014, and 2015 (as MSE 5001)

Co-Listed

Courses:

## Course Reviewer Comments

Key: 4413

Preview Bridge

Date Submitted: 03/04/20 10:56 am

**Viewing: CHEM ENG 5305: Hazardous** 

## **Materials Management**

File: 2048.1

Last edit: 03/04/20 10:56 am Changes proposed by: luksc

Programs referencing this

course

**SFTYENG-CT: Safety Engineering** 

Requested Fall 2020 08/01/2014

**Effective Change** 

Date

Department

Chemical and Biochemical Engineering

Discipline

Chemical Engineering (CHEM ENG)

Course Number 5305

Title

#### In Workflow

- 1. RCHEMENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

#### **Approval Path**

1. 03/04/20 12:03

pm

Joseph Smith

(smithjose):

Approved for

RCHEMENG Chair 2. 03/05/20 10:29

am

Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary

- 3. 03/12/20 12:17
  pm
  Stephen Raper
  (sraper):
  Approved for
  Engineering DSCC
  Chair
- 4. 03/12/20 12:56
  pm
  Kristy GiacomelliFeys (kristyg):
  Approved for
  Pending CCC
  Agenda post
- 04/02/20 9:06 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 6. 04/02/20 10:08
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

Hazardous Materials Management
Hazardous Materials Mgt

Abbreviated				
Course Title				
Catalog				
Description				
Major themes:	hazard indentifi	cation and char	acterization; safe	ety, health and
environmental	management; a	nd the protection	on of safety, heal	th and environment.
Students will ha	ave an understa	nding of work p	lace and environ	mental hazards in
order to be able	e to facilitate th	eir managemen	t and control. Th	e course will include
an intensive 30	hour hands-on	workshop work	<del>shop.</del>	
Prerequisites				
Chem Eng <b>3131</b>	. <del>3130</del> or gradua	ite standing.		
Field Trip				
Statement				
Credit Hours	LEC: <b>0</b> <del>2</del>	LAB: 1	IND: 0	RSD: 0
Total: 1 3				
Required for	No			
Majors				
Elective for	Yes <del>No</del>			
Majors				
Justification for				
change:				
The lecture mat	cerial is currently	y being taught ir	n other required	courses. The lab
portion is a 30 h	nour hands-on w	vorkshop in coo	rdination with in	dustry.
Semesters				
previously				
offered as an				
experimental				
course				
Last taught as a	3-credit course	e in 2010		
Co-Listed				

Courses:

### Course Reviewer Comments

Key: 2048

Preview Bridge

Date Submitted: 01/14/20 12:32 pm

Viewing: COMP ENG 3110: Computer

## **Organization and Design**

File: 475.4

Last approved: 06/30/14 3:55 am

Last edit: 01/16/20 1:37 pm Changes proposed by: stanleyj

**Programs** 

referencing this

course

<u>CP ENG-BS: Computer Engineering BS</u> CP ENG-MI: Computer Engineering Minor

**Other Courses** 

referencing this

course

In The Prerequisites:

COMP ENG 4096: Computer Engineering Senior Project I

COMP ENG 5110 : Principles of Computer Architecture

Requested

Fall 2020 08/01/2014

**Effective Change** 

Date

Department

**Electrical and Computer Engineering** 

#### In Workflow

- 1. RELECENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

#### **Approval Path**

- 01/14/20 7:25 pm
   Daryl Beetner
   (daryl): Approved
   for RELECENG
  - Chair
- 2. 01/16/20 1:37 pm
  Brittany Parnell
  (ershenb):

Discipline

Computer Engineering (COMP ENG)

Course Number 3110

Title

Approved for CCC Secretary

3. 02/26/20 12:09
pm
Stephen Raper
(sraper):
Approved for
Engineering DSCC
Chair

4. 03/03/20 2:13 pm
Kristy GiacomelliFeys (kristyg):
Approved for
Pending CCC
Agenda post

04/02/20 9:06 am
 Kristy Giacomelli Feys (kristyg):
 Approved for CCC
 Meeting Agenda

6. 04/02/20 10:08
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

#### History

1. Jun 30, 2014 by stanleyj (475.1)

Abbreviated

Computer Org and Design

Course Title

Catalog

Description

Introduction to basic concepts of computer organization and design: metrics for computer performance, computer arithmetic, Von Neumann architecture, instruction implementation, control unit, pipelining, memory systems hierarchy, cache memories and basic I/O controllers.

Prerequisites

**Comp Eng COMP ENG** 2210; preceded or accompanied by **Comp Eng COMP ENG** 3150.

Field Trip

Statement

Credit Hours LEC: 3 LAB: 0 IND: 0 RSD: 0

Total: 3

Required for Yes No

Majors

Elective for No

Majors

Justification for

change:

Comp Eng 3110 is a required course for Computer Engineering majors. Comp Sci 3803 - Computer Organization is an elective course for Computer Science majors. These courses have similar related content that covers necessary topics and content to satisfy the computer organization requirement for Computer Engineering majors. Cross-listing these courses will provide Computer Engineering and Computer Science students with a much needed additional option in computer organization that can be used in their degree programs.

Semesters previously offered as an experimental course

Co-Listed

Courses:

## **COMP SCI 3803 - Computer Organization**

Course Reviewer

Comments

Key: 475

Preview Bridge

Date Submitted: 01/14/20 12:13 pm

Viewing: COMP ENG 5110: Principles of

## **Computer Architecture**

File: 1353.2

Last approved: 05/24/16 4:57 am

Last edit: 01/16/20 1:38 pm Changes proposed by: stanleyj

**Programs** 

referencing this

course

**CP ENG-BS: Computer Engineering BS** 

**Other Courses** 

referencing this

course

In The Prerequisites:

COMP ENG 5130 : Advanced Microcomputer System Design

COMP ENG 5151: Digital Systems Design Laboratory
COMP ENG 6110: Advanced Computer Architecture I

Requested

Fall 2020 08/01/2014

**Effective Change** 

Date

Department

**Electrical and Computer Engineering** 

#### In Workflow

- 1. RELECENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

#### **Approval Path**

- 01/14/20 7:25 pm
   Daryl Beetner
   (daryl): Approved
   for RELECENG
  - Chair
- 2. 01/16/20 1:39 pm Brittany Parnell (ershenb):

Discipline

Computer Engineering (COMP ENG)

Course Number 5110

Title

Approved for CCC Secretary

3. 02/26/20 12:09
pm
Stephen Raper
(sraper):
Approved for
Engineering DSCC
Chair

03/03/20 2:14 pm
 Kristy Giacomelli Feys (kristyg):
 Approved for
 Pending CCC
 Agenda post

04/02/20 9:06 am
 Kristy Giacomelli Feys (kristyg):
 Approved for CCC
 Meeting Agenda

6. 04/02/20 10:08
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

#### History

1. May 24, 2016 by kleb6b (1353.1)

Abbreviated

Principles of Comp Arch

Course Title

#### Catalog

#### Description

Principles of performance measurement and instruction set design; advanced issues in pipelining; instruction level parallelism (dynamic scheduling, branch prediction, multi-issue processors); memory hierarchies for superscalar processors; multi-threading; storage systems; and interconnection networks.

#### **Prerequisites**

Comp Eng 3110.

Field Trip

Statement

**Credit Hours** 

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Required for

No

Majors

Elective for

Yes No

Majors

#### Justification for

#### change:

Comp Eng 5110 - Principles of Computer Architecture and Comp Sci 5803 - Introduction to High Performance Computer Architecture are both 3 credit hour courses with similar related content. Undergraduate Computer Engineering and Computer Science students will benefit with needed additional options for upper level elective courses. Graduate Computer Engineering and Computer Science students will benefit with needed additional course options to satisfy their degree program requirements.

Semesters

previously

offered as an experimental course

Co-Listed

Courses:

## **COMP SCI 5803** - Introduction to High Performance Computer Architecture

Course Reviewer

Comments

Key: 1353

Preview Bridge

Date Submitted: 01/14/20 12:20 pm

Viewing: COMP ENG 6110: Advanced

## **Computer Architecture I**

File: 848.3

Last approved: 05/24/16 4:57 am

Last edit: 01/16/20 1:40 pm Changes proposed by: stanleyj

Other Courses referencing this

course

In The Prerequisites:

COMP ENG 6120: Advanced Computer Architecture II

Requested Fall 2020 08/01/2014

**Effective Change** 

Date

Department

**Electrical and Computer Engineering** 

Discipline

Computer Engineering (COMP ENG)

Course Number 6110

Title

In Workflow

- 1. RELECENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate
  Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

#### **Approval Path**

1. 01/14/20 7:25 pm

Daryl Beetner

(daryl): Approved

for RELECENG

Chair

2. 01/16/20 1:41 pm

Brittany Parnell (ershenb):

Approved for CCC Secretary

- 3. 02/26/20 12:09
  pm
  Stephen Raper
  (sraper):
  Approved for
  Engineering DSCC
  Chair
- 03/03/20 2:15 pm
   Kristy Giacomelli Feys (kristyg):
   Approved for
   Pending CCC
   Agenda post
- 5. 04/02/20 9:06 am
  Kristy GiacomelliFeys (kristyg):
  Approved for CCC
  Meeting Agenda
- 6. 04/02/20 10:08
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

#### History

1. May 24, 2016 by kleb6b (848.1)

Advanced Computer Architecture I

Abbreviated Adv Comp Computer

Course Title Architect I

Catalog

Description

Advanced topics in computer structures, parallel processors, and computer networks. Emphasis on their design, applications, and performance.

Prerequisites

Comp Eng 5110 or Comp Eng 5120.

Field Trip

Statement

Credit Hours LEC: 3 LAB: 0 IND: 0 RSD: 0

Total: 3

Required for No

Majors

Elective for No

Majors

#### Justification for

#### change:

Comp Eng 6110 and Comp Sci 6801 –Topics in Parallel and Distributed Computing are both 3 credit hour courses with similar related content. Graduate Computer Engineering and Computer Science students will benefit with needed additional course options to satisfy their degree program requirements.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

**COMP SCI 6801 - Topics in Parallel and Distributed Computing** 

### Course Reviewer Comments

Key: 848

Preview Bridge

A deleted record cannot be edited

Course Deactivation Proposal Date Submitted: 01/21/20 9:05 am Viewing: COMP ENG 6220: Design Automation of VLSI Systems File: 2051.7 Last approved: 07/07/14 3:48 am Last edit: 01/21/20 9:05 am Changes proposed by: stanleyj	In Workflow  1. RELECENG Chair  2. CCC Secretary  3. Engineering DSCC Chair  4. Pending CCC Agenda post  5. CCC Meeting Agenda
Requested Fall 2020 08/01/2014  Effective Change Date  Department Electrical and Computer Engineering  Discipline	<ul> <li>6. Campus Curricula     Committee Chair</li> <li>7. FS Meeting     Agenda</li> <li>8. Faculty Senate     Chair</li> <li>9. Registrar</li> </ul>
Computer Engineering (COMP ENG)  Course Number 6220  Title	10. CAT entry 11. Peoplesoft  Approval Path 1. 01/16/20 2:40 pm Daryl Beetner (daryl): Approved for RELECENG

Chair

2. 01/21/20 7:59 am

**Brittany Parnell** 

(ershenb): Rollback to Initiator

- 3. 02/20/20 7:45 pm
  Daryl Beetner
  (daryl): Approved
  for RELECENG
  Chair
- 02/24/20 12:56
   pm
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Secretary
- 5. 02/26/20 12:10 pm
  Stephen Raper
  (sraper):
  Approved for
  Engineering DSCC
  Chair
- 6. 03/03/20 2:17 pm
  Kristy GiacomelliFeys (kristyg):
  Approved for
  Pending CCC
  Agenda post
- 7. 04/02/20 9:32 am
  Kristy GiacomelliFeys (kristyg):
  Approved for CCC
  Meeting Agenda

8. 04/02/20 10:08

am

Stephen Raper

(sraper):

Approved for

Campus Curricula

Committee Chair

#### History

1. Jul 7, 2014 by stanleyj (2051.1)

Design Automation of VLSI Systems

Abbreviated Design Automation of VLSI

Course Title Syst

Catalog

Description

A state-of-the-art survey of advanced VLSI design techniques, including ultra-low-voltage designs, asynchronous computing, microfluidic chips, three-dimensional integration and other More-than-Moore technologies.

Prerequisites

COMP ENG 5210.

Field Trip

Statement

Credit Hours LEC: 3 LAB: 0 IND: 0 RSD: 0

Total: 3

Required for No

Majors

Elective for No

Majors

Justification for

change:

Remove course from graduate catalog. This course has not been offered for some time. There is no current instructor to move forward with this course.

This course has not been offered for some time, and there is no faculty member currently able to offer the course in future semesters.

Semesters previously offered as an experimental

Co-Listed

course

Courses:

**Course Reviewer** 

Comments

ershenb (01/21/20 7:59 am): Rollback: Per email with Dr. Stanley (course deactivation)

Key: 2051

Preview Bridge

Date Submitted: 01/17/20 2:35 pm

**Viewing: ENG MGT 6112: Leadership for** 

## **Engineers**

File: 1662.1

Last edit: 01/21/20 9:47 am Changes proposed by: cornss

Other Courses referencing this

course

In The Catalog Description:

PSYCH 6611: Leadership for Engineers

Requested Fall 2020 08/01/2014

**Effective Change** 

Date

Department

Engineering Management and Systems Engineering

Discipline

Engineering Management (ENG MGT)

Course Number 6112

Title

In Workflow

1. RENGMNGT Chair

- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

#### **Approval Path**

1. 01/17/20 3:23 pm Suzanna Long (longsuz): Approved for

RENGMNGT Chair

2. 01/21/20 9:48 am

Brittany Parnell

(ershenb):
Approved for CCC
Secretary
3. 02/26/20 12:09
pm
Stephen Raper
(sraper):
Approved for
Engineering DSCC
Chair

4. 03/03/20 2:18 pm
Kristy GiacomelliFeys (kristyg):
Approved for
Pending CCC
Agenda post

04/02/20 9:06 am
 Kristy Giacomelli Feys (kristyg):
 Approved for CCC
 Meeting Agenda

6. 04/02/20 10:08
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

Leadership for Engineers

Abbreviated Leadership for Engineers

Course Title

#### Catalog

Description

Provides engineers with a background in leadership concepts and principles; enables students to develop practical skills in leading and managing through multiple personal assessment. Topics include leadership styles, managing commitments, conflict resolution, change management, emotional intelligence, team dynamics and business ethics.

Prerequisites

Eng Mgt **5110**. <del>5110 or Psych 4602</del>.

Field Trip

Statement

**Credit Hours** 

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Required for

No

Majors

Elective for

No

Majors

Justification for

change:

Needs of Psychology Department have changed

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

**PSYCH 6611** - Leadership for Engineers

Course Reviewer

Comments

Key: 1662

<u>Preview Bridge</u>

Date Submitted: 02/25/20 2:35 pm

Viewing: GEO ENG 5331: Subsurface

## **Hydrology**

File: 1250.3

Last approved: 06/20/18 3:40 am

Last edit: 04/02/20 9:07 am Changes proposed by: grotekr

**Programs** 

referencing this

course

**GE ENG-BS: Geological Engineering BS** 

HUM ENG-MI: Humanitarian Engineering and Science Minor

**GEO ENG-MS: GEOLOGICAL ENGINEERING MS** 

PROPOSED: Geoenvironmental Science and Engineering CT

PROPOSED: Subsurface Water Resources
EV ENG-BS: Environmental Engineering BS
GE ENG-MI: Geological Engineering Minor
GL&GPH-BS: Geology and Geophysics BS

Other Courses referencing this

course

In The Prerequisites:

GEO ENG 5239 : Groundwater Remediation

**GEO ENG 5320 : Groundwater Modeling** 

GEO ENG 5381: Intermediate Subsurface Hydrology And

#### In Workflow

- 1. RGEOSENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- Pending CCCAgenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

#### **Approval Path**

1. 02/25/20 3:40 pm

David Borrok

(borrokd):

Approved for

**RGEOSENG Chair** 

2. 03/05/20 10:29

am

Kristy Giacomelli-

**Contaminant Transport Mechs** Feys (kristyg): GEO ENG 6331: Advanced Subsurface Hydrology Approved for CCC GEO ENG 6332: Numerical Methods In Subsurface Flow Secretary 3. 03/12/20 12:17 pm Requested Fall 2020 Spring 2019 Stephen Raper **Effective Change** (sraper): Date Approved for **Engineering DSCC** Department Geosciences and Geological and Petroleum Chair 4. 03/12/20 12:57 Engineering pm Discipline Kristy Giacomelli-Geological Engineering (GEO ENG) Feys (kristyg): Course Number 5331 Approved for Pending CCC Title Agenda post 5. 04/02/20 9:06 am Kristy Giacomelli-Feys (kristyg): Approved for CCC Meeting Agenda 6. 04/02/20 10:08 am Stephen Raper (sraper): Approved for Campus Curricula Committee Chair

#### History

 Jun 20, 2018 by grotekr (1250.1) Subsurface Hydrology

Abbreviated

Subsurface Hydrology

Course Title

Catalog

Description

Introduction to the theory and engineering concepts of the movement of subsurface fluids. Hydraulic characteristics of earth materials, aquifer characterization, and flow prediction. Engineering problems related to subsurface fluids.

Prerequisites

Geo Eng 1150 or equivalent, Math 1215.

Field Trip

Statement

**Credit Hours** 

LEC: 2 3

LAB: **1** 0

IND: 0

RSD: 0

Total: 3

Required for

Yes

Majors

Elective for

No

Majors

Justification for

change:

Course material includes a significant hands-on component (field work, laboratory analysis, computer modeling) that is best delivered in a laboratory format. The department has recently acquired new facilities that allow field and lab exercises to be incorporated into the course and new software to process data acquired during the lab.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 1250

Preview Bridge

Date Submitted: 02/25/20 4:36 pm

Viewing: GEO ENG 5381: Intermediate

## **Subsurface Hydrology And Contaminant Transport Mechs**

File: 1052.5

Last approved: 06/20/19 3:39 am

Last edit: 04/02/20 9:08 am Changes proposed by: grotekr

**Programs** 

referencing this

course

GE ENG-BS: Geological Engineering BS

**GEO ENG-MS: GEOLOGICAL ENGINEERING MS** 

PROPOSED: Geoenvironmental Science and Engineering CT

PROPOSED: Subsurface Water Resources

EV ENG-BS: Environmental Engineering BS

**GEOT-ME: Geotechnics ME** 

Requested Fall Spring 2020

**Effective Change** 

Date

Department

Geosciences and Geological and Petroleum

Engineering

#### In Workflow

- 1. RGEOSENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

#### **Approval Path**

- 1. 02/25/20 4:37 pm
  - **David Borrok**
  - (borrokd):
  - Approved for
  - **RGEOSENG Chair**
- 2. 03/03/20 1:53 pm Kristy Giacomelli-
  - Feys (kristyg):

Discipline

Geological Engineering (GEO ENG)

Course Number 5381

Title

Approved for CCC Secretary

3. 03/12/20 12:19
pm
Stephen Raper
(sraper):
Approved for
Engineering DSCC
Chair

4. 03/12/20 12:59 pm

Kristy GiacomelliFeys (kristyg):
Approved for
Pending CCC
Agenda post

5. 04/02/20 9:06 am Kristy Giacomelli-Feys (kristyg): Approved for CCC Meeting Agenda

6. 04/02/20 10:09
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

#### History

1. Jun 20, 2019 by grotekr (1052.1)

Intermediate Subsurface Hydrology And Contaminant Transport Mechs

Abbreviated

Int Subsurface Hydrology

Course Title

## Catalog

#### Description

A study of the physical/chemical properties of rocks and sediments in the subsurface environment. Emphasis is put on waterrock properties such as permeability, capillarity, and mechanical dispersion. Both microscopic and macroscopic approaches are used.

## Prerequisites

Geo Eng 5331, Geo Eng 5332, or Geol 4411.

Field Trip

Statement

Credit Hours LEC: 2 3 LAB: 1 0 IND: 0 RSD: 0

Total: 3

Required for No

Majors

Elective for Yes

Majors

#### Justification for

#### change:

Course material includes a significant hands-on component (computer modeling, data analysis, field work) that is best delivered in a laboratory format. The department has recently acquired new facilities that allow field and lab exercises to be incorporated into the course and new software to process data acquired during the lab.

## Semesters

previously

offered as	an
experime	ntal
course	

Co-Listed

Courses:

Course Reviewer

Comments

Key: 1052

Date Submitted: 02/25/20 2:36 pm

Viewing: GEOLOGY 4411: Hydrogeology

File: 2063.1

Last edit: 04/02/20 9:08 am Changes proposed by: grotekr

**Programs** 

referencing this

course

PROPOSED: Geoenvironmental Science and Engineering CT

PROPOSED: Subsurface Water Resources
GL&GPH-BS: Geology and Geophysics BS

Requested Fall 2020 08/14/2018

**Effective Change** 

Date

Department

Geosciences and Geological and Petroleum

Engineering

Discipline

Geology (GEOLOGY)

Course Number 4411

Title

In Workflow

1. RGEOSENG Chair

2. CCC Secretary

3. Sciences DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

**Approval Path** 

1. 02/25/20 3:40 pm

David Borrok

(borrokd):

Approved for

**RGEOSENG Chair** 

2. 03/05/20 10:29

am

Kristy Giacomelli-

Feys (kristyg):
Approved for CCC
Secretary

Secretary
3. 03/11/20 11:33
am
Katie Shannon
(shannonk):
Approved for

Sciences DSCC

Chair

4. 03/11/20 2:46 pm
Kristy GiacomelliFeys (kristyg):
Approved for
Pending CCC
Agenda post

04/02/20 9:07 am
 Kristy Giacomelli Feys (kristyg):
 Approved for CCC
 Meeting Agenda

6. 04/02/20 10:09
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

Hydrogeology

Hydrogeology

Abbreviated Course Title

## Description

This course discusses geologic aspects of major surface and subsurface hydrologic systems of North America. Chemical and physical relationships between groundwater and fractures, faults, karst, subsurface pressures, mineral deposits plus both contaminant and hydrocarbon migration are discussed.

## **Prerequisites**

Geo Eng 1150 or Geology 1110, Geology 3620 recommended.

Field Trip

Statement

Credit Hours LEC: 2 3 LAB: 10 IND: 0 RSD: 0

Total: 3

Required for No

Majors

Elective for No

Majors

Justification for

## change:

Course material includes a significant hands-on component (field work, laboratory analysis, computer modeling) that is best delivered in a laboratory format. The department has recently acquired new facilities that allow field and lab exercises to be incorporated into the course and new software to process data acquired during the lab.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

# Course Reviewer Comments

Key: 2063

Date Submitted: 03/11/20 2:50 pm

**Viewing: MIL AIR 1110: Air Force Heritage** 

# and Values I

File: 1532.4

Last approved: 08/05/19 6:01 am

Last edit: 03/11/20 2:50 pm Changes proposed by: ungerb

Programs

referencing this

course

MIL AIR-MI: Military Aerospace Studies Minor

Requested Fall Spring 2020

**Effective Change** 

Date

Department

Aerospace Studies - Air Force ROTC

Discipline

Military Science - Air Force (MIL AIR)

Course Number 1110

Title

## In Workflow

- 1. RMILISCI Chair
- 2. CCC Secretary
- 3. Sarah Johnson
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

## **Approval Path**

- 1. 03/11/20 3:28 pm
  - Brent Unger

(ungerb):

Approved for

RMILISCI Chair

2. 03/11/20 3:53 pm

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC Secretary

- 3. 03/11/20 4:17 pm
  Sarah Johnson
  (johsarah):
  Approved for
  johsarah
- 4. 03/12/20 1:00 pm
  Kristy GiacomelliFeys (kristyg):
  Approved for
  Pending CCC
  Agenda post
- 04/02/20 9:09 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 6. 04/02/20 10:09
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

## History

1. Aug 5, 2019 by ungerb (1532.1)

Air Force Heritage and Values I

Abbreviated Heritage and Values I

Course Title

## Description

This course provides an introduction to the Air Force, hopefully encouraging students to pursue an AF career or at least seek additional information to be better informed about the role of the USAF. The course allows students to examine general aspects of the Department of the Air Force, AF Leadership, Air Force benefits, and opportunities for AF officers.

Prerequisites

Field Trip

Statement

Credit Hours LEC: .5 1 LAB: .5 0 IND: 0 RSD: 0

Total: 1

Required for No

Majors

Elective for No

Majors

Justification for

#### change:

I put 1.0 for the lecture and 0.0 for the lab when I previously made changes for this course, not realizing that the lab would then be removed from the schedule altogether. However, our Air Force ROTC cadets are required to take both the lecture and the lab, so we need the lab back on the schedule. I specifically gave 1.0 for the lecture and 0.0 for the lab because civilian students are eligible to take the class (but not the lab), so they would only receive 0.5 credit for the class if they took the lecture only. Regardless, I need to request that the lab be added back on so that cadets taking Mil Air 1110 for Fall 2020 will automatically have the Leadership Lab added to their schedule as well. Thank you!

v/r

Brent J. Unger, Col, USAF

Semesters previously offered as an experimental course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 1532

Date Submitted: 03/11/20 2:51 pm

Viewing: MIL AIR 1120 : Air Force Heritage

## and Values II

File: 1390.3

Last approved: 08/05/19 6:01 am

Last edit: 03/11/20 2:51 pm Changes proposed by: ungerb

Programs

referencing this

course

MIL AIR-MI: Military Aerospace Studies Minor

Requested Spring 2021 2020

**Effective Change** 

Date

Department

Aerospace Studies - Air Force ROTC

Discipline

Military Science - Air Force (MIL AIR)

Course Number 1120

Title

## In Workflow

- 1. RMILISCI Chair
- 2. CCC Secretary
- 3. Sarah Johnson
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

## **Approval Path**

1. 03/11/20 3:28 pm

**Brent Unger** 

(ungerb):

Approved for

RMILISCI Chair

2. 03/11/20 3:53 pm

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC Secretary

- 3. 03/11/20 4:18 pm
  Sarah Johnson
  (johsarah):
  Approved for
  johsarah
- 4. 03/12/20 1:01 pm Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post
- 04/02/20 9:09 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 6. 04/02/20 10:09
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

## History

1. Aug 5, 2019 by ungerb (1390.1)

Air Force Heritage and Values II

Abbreviated Heritage and Values II

Course Title

## Description

This course provides an introduction to the Air Force, hopefully encouraging students to pursue an AF career or at least seek additional information to be better informed about the role of the USAF. The course allows students to examine general aspects of the Department of the Air Force, AF Leadership, Air Force benefits, and opportunities for AF officers.

Prerequisites

Field Trip

Statement

Credit Hours LEC: .5 1 LAB: .5 0 IND: 0 RSD: 0

Total: 1

Required for No

Majors

Elective for No

Majors

Justification for

#### change:

I put 1.0 for the lecture and 0.0 for the lab when I previously made changes for this course, not realizing that the lab would then be removed from the schedule altogether. However, our Air Force ROTC cadets are required to take both the lecture and the lab, so we need the lab back on the schedule. I specifically gave 1.0 for the lecture and 0.0 for the lab because civilian students are eligible to take the class (but not the lab), so they would only receive 0.5 credit for the class if they took the lecture only. Regardless, I need to request that the lab be added back on so that cadets taking Mil Air 1120 for Spring 2021 will automatically have the Leadership Lab added to their schedule as well. Thank you!

v/r

Brent J. Unger, Col, USAF

Semesters previously offered as an experimental course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 1390

Date Submitted: 03/11/20 2:52 pm

Viewing: MIL AIR 2110: Team and

# Leadership Fundamentals I

File: 418.4

Last approved: 08/07/19 6:01 am

Last edit: 03/11/20 2:52 pm Changes proposed by: ungerb

Programs referencing this

course

MIL AIR-MI: Military Aerospace Studies Minor

Requested Fall Spring 2020

**Effective Change** 

Date

Department

Aerospace Studies - Air Force ROTC

Discipline

Military Science - Air Force (MIL AIR)

Course Number 2110

Title

#### In Workflow

- 1. RMILISCI Chair
- 2. CCC Secretary
- 3. Sarah Johnson
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

## **Approval Path**

1. 03/11/20 3:28 pm

**Brent Unger** 

(ungerb):

Approved for RMILISCI Chair

2. 03/11/20 3:53 pm

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC Secretary

- 3. 03/11/20 4:18 pm
  Sarah Johnson
  (johsarah):
  Approved for
  johsarah
- 4. 03/12/20 1:01 pm Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post
- 04/02/20 9:09 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 6. 04/02/20 10:09
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

## History

1. Aug 7, 2019 by ungerb (418.1)

Team and Leadership Fundamentals I

Abbreviated Ldrshp Fundamentals I

Course Title

## Description

This course is designed to provide a fundamental understanding of both leadership and team building. It is imperative that cadets are taught from the beginning that there are many layers to leadership, including aspects that don't always jump to mind. Such things include listening, understanding themselves, being a good follower and problem solving.

Prerequisites

Field Trip

Statement

Credit Hours LEC: .5 1 LAB: .5 0 IND: 0 RSD: 0

Total: 1

Required for No

Majors

Elective for No

Majors

Justification for

#### change:

I put 1.0 for the lecture and 0.0 for the lab when I previously made changes for this course, not realizing that the lab would then be removed from the schedule altogether. However, our Air Force ROTC cadets are required to take both the lecture and the lab, so we need the lab back on the schedule. I specifically gave 1.0 for the lecture and 0.0 for the lab because civilian students are eligible to take the class (but not the lab), so they would only receive 0.5 credit for the class if they took the lecture only. Regardless, I need to request that the lab be added back on so that cadets taking Mil Air 2110 for Fall 2020 will automatically have the Leadership Lab added to their schedule as well. Thank you!

v/r

Brent J. Unger, Col, USAF

Semesters previously offered as an experimental course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 418

Date Submitted: 03/11/20 2:53 pm

Viewing: MIL AIR 2120: Team and

# **Leadership Fundamentals II**

File: 1092.4

Last approved: 08/05/19 6:01 am

Last edit: 03/11/20 2:53 pm Changes proposed by: ungerb

Programs

referencing this

course

MIL AIR-MI: Military Aerospace Studies Minor

Requested Spring 2021 2020

**Effective Change** 

Date

Department

Aerospace Studies - Air Force ROTC

Discipline

Military Science - Air Force (MIL AIR)

Course Number 2120

Title

## In Workflow

- 1. RMILISCI Chair
- 2. CCC Secretary
- 3. Sarah Johnson
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

## **Approval Path**

1. 03/11/20 3:28 pm

**Brent Unger** 

(ungerb):

Approved for

**RMILISCI** Chair

2. 03/11/20 3:53 pm

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC Secretary

- 3. 03/11/20 4:18 pm
  Sarah Johnson
  (johsarah):
  Approved for
  johsarah
- 03/12/20 1:03 pm
   Kristy Giacomelli Feys (kristyg):
   Approved for
   Pending CCC
   Agenda post
- 04/02/20 9:09 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 6. 04/02/20 10:09
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

## History

1. Aug 5, 2019 by ungerb (1092.1)

Team and Leadership Fundamentals II

Abbreviated Ldrshp Fundamentals II

Course Title

## Description

This course is designed to provide a fundamental understanding of both leadership and team building. It is imperative that cadets are taught from the beginning that there are many layers to leadership, including aspects that don't always jump to mind. Such things include listening, understanding themselves, being a good follower and problem solving.

Prerequisites

Field Trip

Statement

Credit Hours LEC: .5 1 LAB: .5 0 IND: 0 RSD: 0

Total: 1

Required for No

Majors

Elective for No

Majors

Justification for

#### change:

I put 1.0 for the lecture and 0.0 for the lab when I previously made changes for this course, not realizing that the lab would then be removed from the schedule altogether. However, our Air Force ROTC cadets are required to take both the lecture and the lab, so we need the lab back on the schedule. I specifically gave 1.0 for the lecture and 0.0 for the lab because civilian students are eligible to take the class (but not the lab), so they would only receive 0.5 credit for the class if they took the lecture only. Regardless, I need to request that the lab be added back on so that cadets taking Mil Air 2120 for Spring 2021 will automatically have the Leadership Lab added to their schedule as well. Thank you!

v/r

Brent J. Unger, Col, USAF

Semesters previously offered as an experimental course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 1092

Date Submitted: 03/11/20 2:54 pm

Viewing: MIL AIR 3110: Leading People &

# **Effective Communication I**

File: 419.3

Last approved: 08/05/19 6:01 am

Last edit: 03/11/20 2:54 pm Changes proposed by: ungerb

**Programs** 

referencing this

course

AE ENG-BS: Aerospace Engineering BS

MIL AIR-MI: Military Aerospace Studies Minor

CMP SC-BS: Computer Science BS

MC ENG-BS: Mechanical Engineering BS

Requested Fall Spring 2020

**Effective Change** 

Date

Department

Aerospace Studies - Air Force ROTC

Discipline

Military Science - Air Force (MIL AIR)

Course Number 3110

Title

## In Workflow

- 1. RMILISCI Chair
- 2. CCC Secretary
- 3. Sarah Johnson
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

## **Approval Path**

- 1. 03/11/20 3:28 pm
  - Brent Unger
  - (ungerb):
  - Approved for
  - **RMILISCI** Chair
- 2. 03/11/20 3:53 pm
  - Kristy Giacomelli-
  - Feys (kristyg):

Approved for CCC Secretary

- 3. 03/11/20 4:18 pm
  Sarah Johnson
  (johsarah):
  Approved for
  johsarah
- 03/12/20 1:05 pm
   Kristy Giacomelli Feys (kristyg):
   Approved for
   Pending CCC
   Agenda post
- 5. 04/02/20 9:09 am
  Kristy GiacomelliFeys (kristyg):
  Approved for CCC
  Meeting Agenda
- 6. 04/02/20 10:09
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

## History

1. Aug 5, 2019 by ungerb (419.1)

Leading People & Effective Communication I

Abbreviated Effective Comm I

Course Title

#### Description

This course is designed to build on the leadership fundamentals taught in AS200. Cadets will have the opportunity to utilize their skills as they begin more of a leadership role in the detachment. The goal is for cadets to have a more in-depth understanding of how to effectively lead people, and provide them with the tools to use in their leadership roles.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 23 LAB: 10 IND: 0 RSD: 0

Total: 3

Required for No

Majors

Elective for No

Majors

#### Justification for

#### change:

I put 3.0 for the lecture and 0.0 for the lab when I previously made changes for this course, not realizing that the lab would then be removed from the schedule altogether. However, our Air Force ROTC cadets are required to take both the lecture and the lab, so we need the lab back on the schedule. I specifically gave 3.0 for the lecture and 0.0 for the lab because civilian students are eligible to take the class (but not the lab), so they would only receive 2.0 credits for the class if they took the lecture only. Regardless, I need to request that the lab be added back on so that cadets taking Mil Air 3110 for Fall 2020 will automatically have the Leadership Lab added to their schedule as well. Thank you!

# Brent J. Unger, Col, USAF

Semesters previously offered as an experimental course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 419

Date Submitted: 03/11/20 2:55 pm

Viewing: MIL AIR 3120: Leading People &

# **Effective Communication II**

File: 1093.3

Last approved: 08/05/19 6:01 am

Last edit: 03/11/20 2:55 pm Changes proposed by: ungerb

**Programs** 

referencing this

course

AE ENG-BS: Aerospace Engineering BS

MIL AIR-MI: Military Aerospace Studies Minor

CMP SC-BS: Computer Science BS

MC ENG-BS: Mechanical Engineering BS

Requested Spring **2021** <del>2020</del>

**Effective Change** 

Date

Department

Aerospace Studies - Air Force ROTC

Discipline

Military Science - Air Force (MIL AIR)

Course Number 3120

Title

## In Workflow

- 1. RMILISCI Chair
- 2. CCC Secretary
- 3. Sarah Johnson
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

## **Approval Path**

1. 03/11/20 3:28 pm

**Brent Unger** 

(ungerb):

Approved for

**RMILISCI** Chair

2. 03/11/20 3:53 pm

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC Secretary

- 03/11/20 4:19 pm
   Sarah Johnson
   (johsarah):
   Approved for
   johsarah
- 03/12/20 1:07 pm
   Kristy Giacomelli Feys (kristyg):
   Approved for
   Pending CCC
   Agenda post
- 04/02/20 9:09 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 6. 04/02/20 10:09
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

## History

1. Aug 5, 2019 by ungerb (1093.1)

Leading People & Effective Communication II

Abbreviated Effective Comm II

Course Title

#### Description

This course is designed to build on the leadership fundamentals taught in AS200. Cadets will have the opportunity to utilize their skills as they begin more of a leadership role in the detachment. The goal is for cadets to have a more in-depth understanding of how to effectively lead people, and provide them with the tools to use in their leadership roles.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 23 LAB: 10 IND: 0 RSD: 0

Total: 3

Required for No

Majors

Elective for No

Majors

#### Justification for

#### change:

I put 3.0 for the lecture and 0.0 for the lab when I previously made changes for this course, not realizing that the lab would then be removed from the schedule altogether. However, our Air Force ROTC cadets are required to take both the lecture and the lab, so we need the lab back on the schedule. I specifically gave 3.0 for the lecture and 0.0 for the lab because civilian students are eligible to take the class (but not the lab), so they would only receive 2.0 credits for the class if they took the lecture only. Regardless, I need to request that the lab be added back on so that cadets taking Mil Air 3120 for Spring 2021 will automatically have the Leadership Lab added to their schedule as well. Thank you!

# Brent J. Unger, Col, USAF

Semesters previously offered as an experimental course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 1093

Date Submitted: 03/11/20 3:30 pm

Viewing: MIL AIR 4110: National Security,

# Leadership Responsibilities & Commissioning Preparation I

File: 420.3

Last approved: 08/05/19 6:01 am

Last edit: 03/11/20 3:30 pm Changes proposed by: ungerb

**Programs** 

referencing this

course

AE ENG-BS: Aerospace Engineering BS

MIL AIR-MI: Military Aerospace Studies Minor

CMP SC-BS: Computer Science BS

MC ENG-BS: Mechanical Engineering BS

Fall Spring 2020

**Effective Change** 

Date

Department

Requested

Aerospace Studies - Air Force ROTC

Discipline

Military Science - Air Force (MIL AIR)

Course Number 4110

## In Workflow

- 1. RMILISCI Chair
- 2. CCC Secretary
- 3. Sarah Johnson
- 4. Pending CCC Agenda post
- CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

## **Approval Path**

1. 03/11/20 3:07 pm

**Brent Unger** 

(ungerb):

Rollback to

Initiator

2. 03/11/20 3:31 pm

Brent Unger

(ungerb):

3. 03/11/20 3:53 Kristy Giacome Feys (kristyg): Approved for C Secretary 4. 03/11/20 4:19 Sarah Johnson (johsarah): Approved for johsarah 5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 7. 04/02/20 10:09 Approved for Meeting Agency 7. 04/02/20 10:09 Am Stephen Raper (sraper): Approved for	Title	Approved for
Kristy Giacome Feys (kristyg): Approved for C Secretary  4. 03/11/20 4:19 Sarah Johnson (johsarah): Approved for johsarah 5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agenc 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		RMILISCI Chair
Feys (kristyg): Approved for C Secretary  4. 03/11/20 4:19 Sarah Johnson (johsarah): Approved for johsarah  5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for Od/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agend 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		3. 03/11/20 3:53 pm
Approved for C Secretary  4. 03/11/20 4:19 Sarah Johnson (johsarah): Approved for johsarah  5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agend 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		Kristy Giacomelli-
Secretary  4. 03/11/20 4:19 Sarah Johnson (johsarah): Approved for johsarah  5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post  6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for O Meeting Agend  7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		Feys (kristyg):
4. 03/11/20 4:19 Sarah Johnson (johsarah): Approved for johsarah 5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for Of Meeting Agence 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		Approved for CCC
Sarah Johnson (johsarah): Approved for johsarah 5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agenc 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		Secretary
Sarah Johnson (johsarah): Approved for johsarah 5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agenc 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		4. 03/11/20 4:19 pm
Approved for johsarah  5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for Of Meeting Agend 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		
Approved for johsarah  5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for Of Meeting Agend 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		(johsarah):
johsarah 5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for O Meeting Agend 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		
5. 03/12/20 1:09 Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agenc 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		
Kristy Giacome Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agence 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		5. 03/12/20 1:09 pm
Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agenc 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		Kristy Giacomelli-
Approved for Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agence 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		
Pending CCC Agenda post 6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agence 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		
Agenda post  6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for O Meeting Agend  7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		
6. 04/02/20 9:09 Kristy Giacome Feys (kristyg): Approved for C Meeting Agence 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		
Kristy Giacome Feys (kristyg): Approved for C Meeting Agence 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		6. 04/02/20 9:09 am
Feys (kristyg): Approved for C Meeting Agence 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		Kristy Giacomelli-
Approved for Continue		·
Meeting Agend 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		Approved for CCC
7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for		Meeting Agenda
am Stephen Raper (sraper): Approved for		7. 04/02/20 10:09
(sraper): Approved for		am
(sraper): Approved for		Stephen Raper
Approved for		
Campus Curric		Campus Curricula
		Committee Chair

## History

1. Aug 5, 2019 by ungerb (420.1)

National Security, Leadership Responsibilities & Commissioning

Preparation I

Abbreviated Ntl Security Issues I

Course Title

Catalog

Description

The AS400 cadet should comprehend the basic elements of national security policy and process. The student should comprehend the air and space power operations as well as understand selected roles of the military in society and current domestic and international issues affecting the military profession.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 2 LAB: 1 IND: 0 RSD: 0

Total: 3

Required for No

Majors

Elective for No

Majors

Justification for

#### change:

I put 3.0 for the lecture and 0.0 for the lab when I previously made changes for this course, not realizing that the lab would then be removed from the schedule altogether. However, our Air Force ROTC cadets are required to take both the lecture and the lab, so we need the lab back on the schedule. I specifically gave 3.0 for the lecture and 0.0 for the lab because civilian students are eligible to take the class (but not the lab), so they would only receive 2.0 credits for the class if they

took the lecture only. Regardless, I need to request that the lab be added back on so that cadets taking Mil Air 4110 for Fall 2020 will automatically have the Leadership Lab added to their schedule as well. Thank you!

v/r

Brent J. Unger, Col, USAF Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

ungerb (03/11/20 3:07 pm): Rollback: Need to change class time from Tuesday to Monday.

Key: 420

Date Submitted: 03/11/20 3:31 pm

Viewing: MIL AIR 4120: National Security,

# Leadership Responsibilities & Commissioning Preparation II

File: 748.3

Last approved: 08/05/19 6:01 am

Last edit: 03/11/20 3:31 pm Changes proposed by: ungerb

**Programs** 

referencing this

course

AE ENG-BS: Aerospace Engineering BS

**EL ENG-BS: Electrical Engineering BS** 

MIL AIR-MI: Military Aerospace Studies Minor

**CMP SC-BS: Computer Science BS** 

MC ENG-BS: Mechanical Engineering BS

Requested

Spring **2021** <del>2020</del>

**Effective Change** 

Date

Department

Aerospace Studies - Air Force ROTC

Discipline

Military Science - Air Force (MIL AIR)

#### In Workflow

- 1. RMILISCI Chair
- 2. CCC Secretary
- 3. Sarah Johnson
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

## **Approval Path**

1. 03/11/20 3:27 pm

**Brent Unger** 

(ungerb):

Rollback to

Initiator

2. 03/11/20 3:31 pm

**Brent Unger** 

(ungerb):

Course Number 41	.20		Approved for
Title			RMILISCI Chair
Title		3.	03/11/20 3:53 pm
			Kristy Giacomelli-
			Feys (kristyg):
			Approved for CCC
			Secretary
		4.	03/11/20 4:19 pm
			Sarah Johnson
			(johsarah):
			Approved for
			johsarah
		5.	03/12/20 1:10 pm
			Kristy Giacomelli-
			Feys (kristyg):
			Approved for
			Pending CCC
			Agenda post
		6.	04/02/20 9:09 am
			Kristy Giacomelli-
			Feys (kristyg):
			Approved for CCC
			Meeting Agenda
		7.	04/02/20 10:09
			am
			Stephen Raper
			(sraper):
			Approved for
			Campus Curricula
			Committee Chair

1. Aug 5, 2019 by ungerb (748.1)

National Security, Leadership Responsibilities & Commissioning

Preparation II

Abbreviated Ntl Security Issues II

Course Title

Catalog

Description

The AS400 cadet should comprehend the basic elements of national security policy and process. The student should comprehend the air and space power operations as well as understand selected roles of the military in society and current domestic and international issues affecting the military profession.

**Prerequisites** 

Field Trip

Statement

Credit Hours LEC: 2 LAB: 1 IND: 0 RSD: 0

Total: 3

Required for No

Majors

Elective for No

Majors

Justification for

#### change:

I put 3.0 for the lecture and 0.0 for the lab when I previously made changes for this course, not realizing that the lab would then be removed from the schedule altogether. However, our Air Force ROTC cadets are required to take both the lecture and the lab, so we need the lab back on the schedule. I specifically gave 3.0 for the lecture and 0.0 for the lab because civilian students are eligible to take the class (but not the lab), so they would only receive 2.0 credits for the class if they

took the lecture only. Regardless, I need to request that the lab be added back on so that cadets taking Mil Air 4120 for Spring 2021 will automatically have the Leadership Lab added to their schedule as well. Thank you!

v/r

Brent J. Unger, Col, USAF Semesters previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

ungerb (03/11/20 3:27 pm): Rollback: Need to change class time from Tuesday to Monday.

Key: 748

Date Submitted: 02/18/20 1:25 pm

Viewing: MIL ARMY 1250: Leadership and

# **Personal Development**

File: 751.5

Last approved: 11/25/19 6:01 am

Last edit: 02/18/20 1:25 pm Changes proposed by: eckertr

Other Courses referencing this

course

In The Prerequisites:

MIL ARMY 3250: Adaptive Tactical Leadership

Requested Fall 2020

**Effective Change** 

Date

Department

Military Science - Army ROTC

Discipline

Military Science - Army (MIL ARMY)

Course Number 1250

Title

#### In Workflow

- 1. RMILARMY Chair
- 2. CCC Secretary
- 3. Krista Chambers
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

### **Approval Path**

- 02/18/20 1:07 pm
   Kristy Giacomelli Feys (kristyg):
   Rollback to
   Initiator
- 2. 02/18/20 1:55 pm Lonnie Pirtle

(lp9d6): Approved

for RMILARMY Chair 3. 02/20/20 10:26 am Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary 4. 02/20/20 11:01 am **Krista Chambers** (krista): Approved for krista 5. 02/24/20 1:11 pm Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post 6. 04/02/20 9:09 am Kristy Giacomelli-Feys (kristyg): Approved for CCC Meeting Agenda 7. 04/02/20 10:09 am Stephen Raper (sraper): Approved for Campus Curricula Committee Chair

1. Nov 25, 2019 by bakervi (751.1)

Leadership and Personal Development

Abbreviated

Ldrsp and Personal Dev

Course Title

Catalog

Description

Introduces cadets to the personal challenges and competencies that are critical for effective leadership. Cadets learn how the personal development of life skills such as critical thinking, goal setting, time management, physical fitness, and stress management relate to leadership, officership, and the Army profession.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 1 LAB: **0** 1 IND: 0 RSD: 0

Total: 1 2

Required for No

Majors

Elective for No

Majors

Justification for

change:

Error in component requirements

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

kristyg (02/18/20 1:07 pm): Rollback: Correcting workflow issues

Key: 751

Date Submitted: 02/18/20 1:22 pm In Workflow Viewing: MIL ARMY 1500: Introduction to 1. RMILARMY Chair **Tactical Leadership** 2. CCC Secretary 3. Krista Chambers File: 421.5 4. Pending CCC Last approved: 11/25/19 6:01 am Agenda post Last edit: 04/02/20 9:10 am 5. CCC Meeting Changes proposed by: eckertr Agenda Requested Fall Spring 2020 6. Campus Curricula **Effective Change Committee Chair** Date 7. FS Meeting Agenda Department 8. Faculty Senate Military Science - Army ROTC Chair Discipline 9. Registrar Military Science - Army (MIL ARMY) 10. CAT entry Course Number 1500 11. Peoplesoft Title **Approval Path** 1. 02/18/20 1:07 pm Kristy Giacomelli-Feys (kristyg): Rollback to Initiator 2. 02/18/20 1:55 pm Lonnie Pirtle

(lp9d6): Approved

for RMILARMY

Chair

3. 02/20/20 10:26

am

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC

Secretary

4. 02/20/20 11:01

am

Krista Chambers

(krista): Approved

for krista

5. 02/24/20 1:11 pm

Kristy Giacomelli-

Feys (kristyg):

Approved for

Pending CCC

Agenda post

6. 04/02/20 9:10 am

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC

Meeting Agenda

7. 04/02/20 10:09

am

Stephen Raper

(sraper):

Approved for

Campus Curricula

Committee Chair

1. Nov 25, 2019 by bakervi (421.1)

Introduction to Tactical Leadership

Abbreviated

Intro to Tactical Ldrsp

Course Title

Catalog

Description

Overviews leadership fundamentals such as setting direction, problem-solving, listening, presenting briefs, providing feedback, and using effective writing skills. Cadets explore dimensions of leadership values, attributes, skills, and actions in the context of practical, hands-on, and interactive exercises.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 1 LAB: **0** 1 IND: 0 RSD: 0

Total: 1 2

Required for No

Majors

Elective for No

Majors

Justification for

change:

Error in component requirements

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

kristyg (02/18/20 1:07 pm): Rollback: Correcting workflow issues

Key: 421

Date Submitted: 02/18/20 1:24 pm In Workflow Viewing: MIL ARMY 2250: Innovative Team 1. RMILARMY Chair Leadership 2. CCC Secretary 3. Krista Chambers File: 1734.4 4. Pending CCC Last approved: 11/25/19 6:01 am Agenda post Last edit: 02/18/20 1:24 pm 5. CCC Meeting Changes proposed by: eckertr Agenda Requested Fall 2020 6. Campus Curricula **Effective Change Committee Chair** Date 7. FS Meeting Agenda Department 8. Faculty Senate Military Science - Army ROTC Chair Discipline 9. Registrar Military Science - Army (MIL ARMY) 10. CAT entry Course Number 2250 11. Peoplesoft Title **Approval Path** 1. 02/18/20 1:07 pm Kristy Giacomelli-Feys (kristyg): Rollback to Initiator 2. 02/18/20 1:55 pm Lonnie Pirtle (lp9d6): Approved

for RMILARMY

Chair

3. 02/20/20 10:30

am

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC

Secretary

4. 02/20/20 11:01

am

Krista Chambers

(krista): Approved

for krista

5. 02/24/20 1:12 pm

Kristy Giacomelli-

Feys (kristyg):

Approved for

Pending CCC

Agenda post

6. 04/02/20 9:10 am

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC

Meeting Agenda

7. 04/02/20 10:09

am

Stephen Raper

(sraper):

Approved for

Campus Curricula

Committee Chair

1. Nov 25, 2019 by bakervi (1734.1)

Innovative Team Leadership

Abbreviated

**Innovative Team Ldrsp** 

Course Title

Catalog

Description

Develop knowledge of self, self-confidence and individual leadership techniques through problem solving and critical thinking skills. Apply communication, feedback, and conflict resolution skills.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 3 LAB: **0** 1 IND: 0 RSD: 0

Total: 34

Required for No

Majors

Elective for No

Majors

Justification for

change:

Error in component requirements

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

kristyg (02/18/20 1:07 pm): Rollback: Correcting workflow issues

Key: 1734

Date Submitted: 02/18/20 1:25 pm

Viewing: MIL ARMY 2500 : Foundations of

# **Tactical Leadership**

File: 1395.3

Last approved: 10/07/19 6:01 am

Last edit: 04/02/20 9:10 am Changes proposed by: eckertr

Other Courses referencing this

course

In The Prerequisites:

MIL ARMY 2750 : Basic Leadership Laboratory

Requested Fall Spring 2020

**Effective Change** 

Date

Department

Military Science - Army ROTC

Discipline

Military Science - Army (MIL ARMY)

Course Number 2500

Title

#### In Workflow

- 1. RMILARMY Chair
- 2. CCC Secretary
- 3. Krista Chambers
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

### **Approval Path**

- 02/18/20 1:07 pm
   Kristy Giacomelli Feys (kristyg):
   Rollback to
   Initiator
- 2. 02/18/20 1:56 pm Lonnie Pirtle

(lp9d6): Approved

for RMILARMY
Chair
3. 02/20/20 10:31
am
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Secretary
4. 02/20/20 11:01
am
Krista Chambers
(krista): Approved
for krista
5. 02/24/20 1:12 pm
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
6. 04/02/20 9:10 am
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Meeting Agenda
7. 04/02/20 10:09
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair
23

 Oct 7, 2019 by bakervi (1395.1)

Foundations of Tactical Leadership

Abbreviated F

Found of Tactical Ldrsp

Course Title

Catalog

Description

Examines the challenges of leading tactical teams in the complex contemporary operating environment (COE). The course highlights dimensions of terrain analysis, patrolling, and operation orders. Further study of the theoretical basis of the Army leadership framework explores the dynamics of adaptive leadership in the context of military operations.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 3 LAB: **0** 1 IND: 0 RSD: 0

Total: 3 4

Required for No

Majors

Elective for No

Majors

Justification for

change:

Error in component requirements

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

kristyg (02/18/20 1:07 pm): Rollback: Correcting workflow issues

Key: 1395

Date Submitted: 02/18/20 2:01 pm

**Viewing: MIL ARMY 2750: Basic Leadership** 

# **Laboratory**

File: 1956.1

Last edit: 04/02/20 9:11 am Changes proposed by: eckertr

Requested Fall 2020 08/14/2018

**Effective Change** 

Date

Department

Military Science - Army ROTC

Discipline

Military Science - Army (MIL ARMY)

Course Number 2750

Title

In Workflow

- 1. RMILARMY Chair
- 2. CCC Secretary
- 3. Krista Chambers
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula
  Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- 10. CAT entry
- 11. Peoplesoft

### Approval Path

1. 02/18/20 1:07 pm

Kristy Giacomelli-

Feys (kristyg):

Rollback to

Initiator

2. 02/18/20 1:59 pm

Lonnie Pirtle

(lp9d6): Rollback

to Initiator

- 3. 02/18/20 2:02 pm Lonnie Pirtle (lp9d6): Approved for RMILARMY Chair
- 4. 02/20/20 10:31amKristy Giacomelli-Feys (kristyg):Approved for CCCSecretary
- 5. 02/20/20 11:01 am Krista Chambers (krista): Approved for krista
- 6. 02/24/20 1:12 pm
  Kristy GiacomelliFeys (kristyg):
  Approved for
  Pending CCC
  Agenda post
- 04/02/20 9:11 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 8. 04/02/20 10:09 am Stephen Raper (sraper): Approved for

Basic Leadership Laboratory

Abbreviated

Basic Leadership Lab

Course Title

Catalog

Description

Hands-on experience in basic military leadership skills, supplementing, but not duplicating classroom instruction in MSI and MSII courses. Training is conducted at squad (8 person group) level with emphasis on leadership development at that level. Topics include oral communication and presentations, decision making, drill and ceremonies, and squad tactics. tactics, land nav, and the tactical bivouac.

Prerequisites

To accompany Mil Army 2500.

Field Trip

Statement

**Credit Hours** 

LEC: 0

LAB: 1

IND: 0

RSD: 0

Total: 1

Required for

No

Majors

Elective for

No

Majors

Justification for

change:

To allow non contracted cadets to enroll

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

kristyg (02/18/20 1:07 pm): Rollback: Correcting workflow issues

Ip9d6 (02/18/20 1:59 pm): Rollback: fix description

Key: 1956

Date Submitted: 02/12/20 11:28 am

Viewing: MUSIC 1130: Wind Symphony

File: 916.4

Last approved: 05/24/16 4:57 am

Last edit: 04/02/20 9:14 am Changes proposed by: lorief

Requested Spring 2021 08/14/2018

**Effective Change** 

Date

Department

Arts, Languages, & Philosophy

Discipline

Music (MUSIC)

Course Number 1130

Title

In Workflow

1. RPHILOSO Chair

2. CCC Secretary

3. Arts &

**Humanities DSCC** 

Chair

4. Pending CCC

Agenda post

5. CCC Meeting

Agenda

6. Campus Curricula

**Committee Chair** 

7. FS Meeting

Agenda

8. Faculty Senate

Chair

9. Registrar

10. CAT entry

11. Peoplesoft

Approval Path

1. 02/13/20 4:24 pm

Audra Merfeld-

Langston

(audram):

Approved for

**RPHILOSO Chair** 

- 02/14/20 3:14 pm
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Secretary
- 3. 02/14/20 4:15 pm
  Petra Dewitt
  (dewittp):
  Approved for Arts
  & Humanities
  DSCC Chair
- 4. 02/24/20 1:13 pm
  Kristy GiacomelliFeys (kristyg):
  Approved for
  Pending CCC
  Agenda post
- 5. 04/02/20 9:14 am
  Kristy GiacomelliFeys (kristyg):
  Approved for CCC
  Meeting Agenda
- 6. 04/02/20 10:09
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

1. May 24, 2016 by denises (916.1)

Wind Symphony Wind Symphony Abbreviated Course Title Catalog Description Open to all students who play a band instrument. Auditions may be used for placement in ensemble. **Prerequisites** Field Trip Statement LEC: 0 **Credit Hours** LAB: 1 2 IND: 0 RSD: 0 Total: 1 2 Required for No Majors Elective for No Majors Justification for change: The credit hours need to be changed from 2 credits to 1 for unification within the Performing Arts ensembles. All other ensembles are 1 credit hour. Semesters previously offered as an experimental course Co-Listed

Courses:

Course Reviewer

Comments

Date Submitted: 02/12/20 11:40 am

Viewing: MUSIC 1131: Marching Band

File: 4293.4

Last approved: 05/24/16 4:57 am

Last edit: 04/02/20 9:14 am Changes proposed by: lorief

Requested Spring 2021 08/14/2018

**Effective Change** 

Date

Department

Arts, Languages, & Philosophy

Discipline

Music (MUSIC)

Course Number 1131

Title

In Workflow

1. RPHILOSO Chair

2. CCC Secretary

3. Arts &

**Humanities DSCC** 

Chair

4. Pending CCC

Agenda post

5. CCC Meeting

Agenda

6. Campus Curricula

**Committee Chair** 

7. FS Meeting

Agenda

8. Faculty Senate

Chair

9. Registrar

10. CAT entry

11. Peoplesoft

**Approval Path** 

1. 02/13/20 4:25 pm

Audra Merfeld-

Langston

(audram):

Approved for

**RPHILOSO Chair** 

- 2. 02/14/20 3:14 pm
  Kristy GiacomelliFeys (kristyg):
  Approved for CCC
  Secretary
- 3. 02/14/20 4:15 pm
  Petra Dewitt
  (dewittp):
  Approved for Arts
  & Humanities
  DSCC Chair
- 4. 02/24/20 1:13 pm
  Kristy GiacomelliFeys (kristyg):
  Approved for
  Pending CCC
  Agenda post
- 04/02/20 9:14 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 6. 04/02/20 10:09
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

1. May 24, 2016 by Denise Sharp (denises)

Marching Band

Abbreviated Marching Band

Course Title

Catalog

Description

Open to all students who play a band instrument. Auditions may be used for placement in ensemble.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 0 LAB: 12 IND: 0 RSD: 0

Total: 1 2

Required for No

Majors

Elective for No

Majors

Justification for

change:

Credit hours need to be changed from 2 credits to 1 for unification within the Performing Arts ensembles. All other ensembles are 1 credit hour.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4293

Date Submitted: 02/12/20 11:41 am

Viewing: MUSIC 1132: University

## **Orchestra**

File: 1780.1

Last edit: 04/02/20 9:15 am Changes proposed by: lorief

Requested Spring 2021 08/01/2014

**Effective Change** 

Date

Department

Arts, Languages, & Philosophy

Discipline

Music (MUSIC)

Course Number 1132

Title

In Workflow

1. RPHILOSO Chair

2. CCC Secretary

3. Arts &

**Humanities DSCC** 

Chair

4. Pending CCC

Agenda post

5. CCC Meeting

**Agenda** 

6. Campus Curricula

**Committee Chair** 

7. FS Meeting

**Agenda** 

8. Faculty Senate

Chair

9. Registrar

10. CAT entry

11. Peoplesoft

**Approval Path** 

1. 02/13/20 4:25 pm

Audra Merfeld-

Langston

(audram):

Approved for

**RPHILOSO Chair** 

02/14/20 3:14 pm
 Kristy Giacomelli Feys (kristyg):
 Approved for CCC
 Secretary

- 3. 02/14/20 4:16 pm
  Petra Dewitt
  (dewittp):
  Approved for Arts
  & Humanities
  DSCC Chair
- 4. 02/24/20 1:14 pm
  Kristy GiacomelliFeys (kristyg):
  Approved for
  Pending CCC
  Agenda post
- 04/02/20 9:15 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 6. 04/02/20 10:09
  am
  Stephen Raper
  (sraper):
  Approved for
  Campus Curricula
  Committee Chair

**University Orchestra** 

Abbreviated University Orchestra

Course Title

Catalog

Description

Open to all students who play stringed, wind, percussion or keyboard instruments used in the symphony orchestra. Students assigned to the orchestra after satisfactory audition.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 0 LAB: 1 2 IND: 0 RSD: 0

Total: 1 2

Required for No

Majors

Elective for No

Majors

Justification for

change:

Credit hours need to be changed from 2 credits to 1 for unification within the Performing Arts ensembles. All other ensembles are 1 credit hour.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 1780

### **Program Change Request**

### **New Program Proposal**

Date Submitted: 01/29/20 10:21 am

**Viewing: PROPOSED: BioInnovation CTU** 

File: 349

Last edit: 01/29/20 10:21 am

Changes proposed by: ershenb

Start Term Fall 2020

Program Code

PROPOSED

Department

**Biological Sciences** 

Title

**BioInnovation CTU** 

#### In Workflow

- 1. RBIOLSCI Chair
- 2. RBUSADMN Chair
- 3. RCHEMIST Chair
- 4. RCHEMENG Chair
- 5. RMATSENG Chair
- 6. CCC Secretary
- 7. Sciences DSCC Chair
- 8. Engineering DSCC Chair
- 9. Pending CCC Agenda post
- 10. CCC Meeting Agenda
- 11. Campus Curricula Committee Chair
- 12. FS Meeting Agenda
- 13. Faculty Senate Chair
- 14. Registrar
- 15. Kristy Giacomelli-Feys

### **Approval Path**

- 01/24/20 3:13 pm David Duvernell (duvernelld): Approved for RBIOLSCI Chair
- 01/29/20 9:49 am
   Brittany Parnell
   (ershenb): Rollback
   to Initiator
- 01/29/20 11:14 am
   David Duvernell
   (duvernelld):
   Approved for
   RBIOLSCI Chair
- 4. 01/31/20 11:34 pm siauk: Approved for RBUSADMN Chair

### **Program Requirements and Description**

- 02/01/20 9:57 am Rainer Glaser (GlaserR): Approved for RCHEMIST Chair
- 6. 02/01/20 11:36 am
  Joseph Smith
  (smithjose):
  Approved for
  RCHEMENG Chair
- 7. 02/02/20 9:59 pm Greg Hilmas (ghilmas): Approved for RMATSENG Chair
- 8. 02/03/20 7:59 am
  Brittany Parnell
  (ershenb):
  Approved for CCC
  Secretary
- 9. 02/14/20 2:04 pm
  Katie Shannon
  (shannonk):
  Approved for
  Sciences DSCC
  Chair
- 02/26/20 12:09 pm Stephen Raper (sraper): Approved for Engineering DSCC Chair
- 03/03/20 2:23 pm
   Kristy Giacomelli-Feys (kristyg):
   Approved for Pending CCC
   Agenda post
- 12. 04/02/20 9:32 am
  Kristy GiacomelliFeys (kristyg):
  Approved for CCC
  Meeting Agenda
- 13. 04/02/20 10:10 am
  Stephen Raper
  (sraper): Approved
  for Campus
  Curricula
  Committee Chair

#### **Undergraduate Certificate in BioInnovation**

The Biological Sciences Department offers a unique course, <u>BIO SCI 3783</u>, that combines biology with entrepreneurship. Students use their scientific knowledge to create a novel biological product. Throughout the process, students interact with marketing experts, patent attorneys, regional biogenerators, funding agencies, and entrepreneurs.

The purpose of a Certificate in BioInnovation will be to further engage students who enroll in the Biological Design and Innovation course with training in entrepreneurship and advanced, innovative biological courses. Students who complete the prescribed coursework in this area will be recognized with a certificate.

In order to receive a Certificate in BioInnovation, the student must have an average cumulative grade point of 3.0 or better in the certificate courses. Once admitted to the program, a student will be given three years to complete the program.

To be awarded a certificate in BioInnovation, a student must meet the following requirements:

Required Course:		
BIO SCI 3783	Biological Design and Innovation I	3
One of the following:		
BUS 1110	Introduction to Management and Entrepreneurship	3
BUS 5980	Business Models for Entrepreneurship and Innovation	3
IS&T 5251	Technological Innovation Management and Leadership	3
MKT 5310	Digital Marketing and Promotions	3
Two of the following:		
BIO SCI 3110	Introduction to Biomedical Engineering	3
or <u>CER ENG 3110</u>	Introduction to Biomedical Engineering	
or CHEM ENG 3210	Introduction to Biomedical Engineering	
BIO SCI 3483	Biomedical Problems	3
BIO SCI 4329	Molecular Genetics Laboratory	2
BIO SCI 4373	Stem Cell Biology	3
BIO SCI 4666	Nanobiotechnology	3
BIO SCI 5210	Biomaterials I	3
or CHEM ENG 5200	Biomaterials I	
or <u>MS&amp;E 5310</u>	Biomaterials I	
BIO SCI 5240	Tissue Engineering	3
or <u>MS&amp;E 5210</u>	Tissue Engineering	
CHEM 4630	Introduction to Bio-Nanotechnology	3
CHEM 4810	Chemistry And Inherent Properties Of Polymers	3

Justification for request

An undergraduate certificate in bioinnovation has been submitted to and approved by UM System.

The purpose of a Certificate in BioInnovation will be to further engage students who enroll in the Biological Design and Innovation course with training in entrepreneurship and advanced, innovative biological courses. Students who complete the prescribed coursework in this area will be recognized with a certificate.

CIP CODE: 261201

Supporting Documents

BioInnovation memo with signatures.pdf

MST PC Dec 2019.pdf

Program change form BioInnovation CT.pdf

Course Reviewer Comments

ershenb (01/28/20 3:50 pm): formatting

ershenb (01/28/20 4:15 pm): . ershenb (01/28/20 4:21 pm): . ershenb (01/29/20 8:06 am): .

ershenb (01/29/20 8:12 am): .

ershenb (01/29/20 9:49 am): Rollback: Per email with Brittany Parnell

# **BIO SC-BS: BIOLOGICAL SCIENCES BS**

#### In Workflow

- 1. RBIOLSCI Chair (duvernelld@mst.edu)
- 2. CCC Secretary (kristyg@mst.edu)
- 3. Sciences DSCC Chair (shannonk@mst.edu)
- 4. Pending CCC Agenda post (kristyg@mst.edu)
- 5. CCC Meeting Agenda (kristyg@mst.edu)
- 6. Campus Curricula Committee Chair (sraper@mst.edu)
- 7. FS Meeting Agenda (kristyg@mst.edu)
- 8. Faculty Senate Chair (cornss@mst.edu)
- 9. Registrar (kristyg@mst.edu)
- 10. Kristy Giacomelli-Feys (kristyg@mst.edu)

### **Approval Path**

- 1. Tue, 10 Mar 2020 15:33:59 GMT David Duvernell (duvernelld): Approved for RBIOLSCI Chair
- Tue, 10 Mar 2020 15:42:31 GMT Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary
- 3. Wed, 11 Mar 2020 16:33:07 GMT Katie Shannon (shannonk): Approved for Sciences DSCC Chair
- Wed, 11 Mar 2020 19:44:30 GMT Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post
- 5. Thu, 02 Apr 2020 14:34:05 GMT Kristy Giacomelli-Feys (kristyg): Approved for CCC Meeting Agenda
- Thu, 02 Apr 2020 15:08:09 GMT Stephen Raper (sraper): Approved for Campus Curricula Committee Chair

#### History

- 1. Aug 1, 2014 by Katie Shannon (shannonk)
- 2. Feb 1, 2016 by Ilene Morgan (imorgan)
- 3. Jun 18, 2018 by Katie Shannon (shannonk)
- 4. Jan 30, 2020 by Katie Shannon (shannonk)

Date Submitted:Thu, 05 Mar 2020 23:05:04 GMT

Viewing:BIO SC-BS: Biological Sciences BS

File: 147.17

Last approved:Thu, 30 Jan 2020 21:27:32 GMT Last edit:Thu, 05 Mar 2020 23:05:04 GMT

Changes proposed by: shannonk

**Start Term** 

Fall 2020

### **Program Code**

**BIO SC-BS** 

#### Department

**Biological Sciences** 

Title

**Biological Sciences BS** 

Program Requirements and Description
Bachelor of Science
Biological Sciences
Degree Requirements

A minimum of 124 credit hours is required for a Bachelor of Science degree in Biological Science.

A minimum grade of "C" is required for each Biological Science course used to fulfill the B.S. degree requirements.

These requirements for the B.S. degree are in addition to credit that is received for basic ROTC.

The Biological Science B.S. degree must include 49 semester hours of biological sciences course work, to include:

-		
BIO SCI 1201	Biological Sciences Freshman Seminar	1
BIO SCI 1113	General Biology	3
or BIO SCI 1213	Principles of Biology	
BIO SCI 1219	General Biology Lab	2
BIO SCI 1223	Biodiversity	3
BIO SCI 1229	Biodiversity Lab	1
BIO SCI 2213	Cell Biology	3
BIO SCI 2219	Cell Biology Laboratory	1
BIO SCI 2223	General Genetics	3
BIO SCI 2263	Ecology	3
BIO SCI 3233	Evolution	3
BIO SCI 4010	Seminar	1
Advanced biological sciences or appr laboratory course from the following:	roved course work in other departments for a total of 49 credit hours of biology-related classes to include at least one	25
BIO SCI 3319	Microbiology Lab	
or BIO SCI 3339	Human Anatomy Physiology I Lab	
or BIO SCI 3349	Human Anatomy and Physiology II Laboratory	
or BIO SCI 4329	Molecular Genetics Laboratory	
19 semester hours of chemistry to in-	clude general chemistry	19
CHEM 1310	General Chemistry I	
& CHEM 1319	and General Chemistry Laboratory	
& CHEM 1320 & CHEM 1100	and General Chemistry II and Introduction To Laboratory Safety & Hazardous Materials	
CHEM 2210	Organic Chemistry I	
& CHEM 2219	and Organic Chemistry I Lab	
& CHEM 2220	and Organic Chemistry II	
& CHEM 2229	and Organic Chemistry II Lab	
2 semesters of College (Engineering)	·	8
PHYSICS 1145	College Physics I	
or PHYSICS 1135	Engineering Physics I	
PHYSICS 2145	College Physics II	
or PHYSICS 2135	Engineering Physics II	
Math and Statistics		8-9
MATH 1208	Calculus With Analytic Geometry I	
or MATH 1214	Calculus For Engineers I	
or MATH 1212	Business Calculus	
STAT 3425	Introduction to Biostatistics	4
	cluding foreign language, and to include:	12
ENGLISH 1120 & ENGLISH 1160	Exposition And Argumentation and Writing Students will normally take ENGLISH 1120 either semester of the first year)	
9 hours of social sciences, to include		9
HISTORY 1200	Modern Western Civilization (or equivalent)	
or HISTORY 1300	American History To 1877	
or HISTORY 1310	American History Since 1877	
or POL SCI 1200	American Government	
Total Credits		109-110

Elective credits:In consultation with his or her advisor, each student will elect sufficient additional courses to complete a minimum of 124 credit hours.

#### Justification for request

STAT 5425 was changed to STAT 3425 for Biostatistics

CHEM 2210 and CHEM 2220 were changed from 4 hour to 3 hour lecture courses, so total Chemistry hours should total 17 now. PHYSICS 1145 and 2145 now include the lab so enrollment in a separate lab course is no longer required

### **Program Change Request**

Date Submitted: 03/11/20 11:45 am

Viewing: PRE-MED-MI: Pre-Medicine

**Minor** 

File: 123.6

Last approved: 12/11/17 10:50 am

Last edit: 03/11/20 11:45 am
Changes proposed by: shannonk

Catalog Pages Using this Program

**Prehealth Professions** 

### In Workflow

- 1. CCC Secretary
- 2. Pending CCC Agenda post
- 3. CCC Meeting Agenda
- 4. Campus Curricula Committee Chair
- 5. FS Meeting Agenda
- 6. Faculty Senate Chair
- 7. Registrar
- 8. Kristy Giacomelli-Feys

Start Term

Fall **2020** <del>2018</del>

Program Code

PRE-MED-MI

Department

College of Arts & Sciences

Title

Pre-Medicine Minor

### **Approval Path**

- 03/11/20 2:42 pm
   Kristy Giacomelli-Feys (kristyg):
   Approved for CCC
   Secretary
- 2. 03/11/20 2:47 pm
  Kristy GiacomelliFeys (kristyg):
  Approved for
  Pending CCC
  Agenda post
- 04/02/20 9:32 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 4. 04/02/20 10:09 am Stephen Raper (sraper): Approved for Campus Curricula Committee Chair

### **Program Requirements and Description**

### **History**

- 1. Mar 31, 2014 by pantaleoa
- 2. Mar 31, 2014 by pantaleoa
- Dec 11, 2017 by David Westenberg (djwesten)

### **Premedicine Minor**

It is recommended that students seeking the Pre-Medicine minor declare their intentions as soon as possible. Students completing the Pre-Medicine minor curriculum in addition to their BA/BS curriculum will have completed all requirements for admission to most Medical, Dental, Veterinary or other health profession programs. However, it is important to consult with a member of the Pre-Health Professions Advisory Committee to ensure you are completing the necessary coursework for your desired profession. The Pre-Medicine minor is not intended for a student majoring in Chemistry, Biological Sciences or Chemical and Biochemical Engineering which already offer a Pre-Medicine approved curriculum. Required courses for the Pre-Medicine minor are:

BIO SCI 1213 & BIO SCI 1219	Principles of Biology and General Biology Lab	5
or <u>BIO SCI 1113</u> & <u>BIO SCI 1219</u>	General Biology and General Biology Lab	
BIO SCI 2213 & BIO SCI 2219	Cell Biology and Cell Biology Laboratory	4
CHEM 1310 & CHEM 1319 & CHEM 1320 & CHEM 1100	General Chemistry I and General Chemistry Laboratory and General Chemistry II and Introduction To Laboratory Safety & Hazardous Materials	9
CHEM 2210 & CHEM 2219 & CHEM 2220 & CHEM 2229	Organic Chemistry I and Organic Chemistry I Lab and Organic Chemistry II and Organic Chemistry II Lab	8
PHYSICS 1145	College Physics I	4
or PHYSICS 1135	Engineering Physics I	
PHYSICS 2145	College Physics II	4
or PHYSICS 2135	Engineering Physics II	
Mathematics two semi	esters to include:	
MATH 1208	Calculus With Analytic Geometry I	
or <u>MATH 1212</u>	Business Calculus	

or <u>MATH 1214</u>	Calculus For Engineers I		
One of the following of	One of the following courses (taking all four courses is strongly encouraged):		
BIO SCI 2223	General Genetics		
BIO SCI 3333	Human Anatomy and Physiology I		
BIO SCI 3343	Human Anatomy and Physiology II		
CHEM 4610	General Biochemistry		
PREMED 3010	Communication Workshop for the Pre-Health Student (Suggested but not required)	1	

# Justification for request

Edited to reflect changes in hours for Org I and II and incorporation of Physics lab into College Physics and General Physics no longer offered

Supporting Documents

Course Reviewer Comments

### **Program Change Request**

Date Submitted: 01/25/20 4:16 pm

**Viewing: TCH COM-MS: Technical** 

# **Communication MS**

File: 135.13

Last approved: 07/24/15 5:46 pm

Last edit: 01/27/20 2:22 pm

Changes proposed by: kswenson

Catalog Pages Using this Program

**Technical Communication** 

Start Term

#### Fall 2020 08/17/2015

**Program Code** 

TCH COM-MS

Department

**English and Technical Communication** 

Title

**Technical Communication MS** 

### In Workflow

- 1. RENGLISH Chair
- 2. CCC Secretary
- 3. Arts & Humanities DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar
- Kristy Giacomelli-Feys

### **Approval Path**

- 01/25/20 4:17 pm Kristine Swenson (kswenson): Approved for RENGLISH Chair
- 2. 01/27/20 2:22 pm

  Brittany Parnell
  (ershenb):
  Approved for CCC
  Secretary
- 3. 01/27/20 3:00 pm
  Petra Dewitt
  (dewittp): Approved
  for Arts &
  Humanities DSCC
  Chair
- 4. 02/24/20 1:23 pm Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post

# **Program Requirements and Description**

- 04/02/20 9:32 am
   Kristy Giacomelli Feys (kristyg):
   Approved for CCC
   Meeting Agenda
- 6. 04/02/20 10:10 am Stephen Raper (sraper): Approved for Campus Curricula Committee Chair

## **History**

- 1. Apr 23, 2014 by Kristine Swenson (kswenson)
- 2. Oct 15, 2014 by Kristine Swenson (kswenson)
- 3. Jul 24, 2015 by pantaleoa

### M.S. Degree Requirements

Ten The following 10 courses totaling (totaling 30 credit hours hours) are required for the M.S.:

All MS students must take TCH COM 6600: Foundations of Technical Communication.

The remaining courses should come from the following list and should be determined in consultation with the student's academic advisors. Students must take 3 TCH COM courses at the 6000 level.

TCH COM 5520	Help Authoring	3
TCH COM 5530	Usability Studies	3
TCH COM 5540	Advanced Layout and Design	3
TCH COM 5550	Advanced Proposal Writing	3
TCH COM 5560	Web-Based Communication	3
TCH COM 5610	History of Technical Communication	3
TCH COM 5620	Research Methods in Technical Communication	3
TCH COM 6001	Special Topics	0-6
TCH COM 6070	Teaching of Technical Communication	3
TCH COM 6410	Theoretical Approaches to Technical Communication	3
TCH COM 6420	Project Management in Technical Communication	3

TCH COM 6440	Advanced Theories of Visual Technical Communication	3
TCH COM 6450	Advanced International Technical Communication	3

Thesis Option: A student completing the master's degree will also take a comprehensive exam during his/her finalsemester. Students interested in pursuing If the student chooses to do a PhD in thesis instead of the exam, and the technical communication faculty give their approval to this plan, the student will have the option of writing a supervised thesis as part to take 6 hours of their coursework. TCH COM 5099 Research in addition to the above 10-course sequence. If the A student chooses to do completing the master's degree will also take a thesis, and the technical communication faculty give their approval to this plan, the student will take 6 hours of TCH COM 5099 Research. comprehensive exam during his/her final semester. Three of these hours may count toward the 30 hr total, but an additional 3 hrs will be required, bringing the total number of degree hours to 33. Completing TCH COM 5620: Research Methods before proposing a thesis is highly recommended.

TCH COM 5620	Research Methods in Technical Communication	3
TCH COM 4520	Course TCH COM 4520 Not Found	3
TCH COM 5510	Technical Editing	3
TCH COM 5530	Usability Studies	3
TCH COM 5610	History of Technical Communication	3
TCH COM 6600	Foundations of Technical Communication	3
TCH COM 5560	Web-Based Communication	3
TCH COM 6440	Advanced Theories of Visual Technical Communication	3
TCH COM 6450	Advanced International Technical Communication	3
TCH COM 5550	Advanced Proposal Writing	3
Total Credits		0
TCH COM 5620	Research Methods in Technical Communication	3
TCH COM 4520	Course TCH COM 4520 Not Found	3
TCH COM 5510	Technical Editing	3
TCH COM 5530	Usability Studies	3
TCH COM 5610	History of Technical Communication	3
TCH COM 6600	Foundations of Technical Communication	3
TCH COM 5560	Web-Based Communication	3
TCH COM 6440	Advanced Theories of Visual Technical Communication	3
TCH COM 6450	Advanced International Technical Communication	3
TCH COM 5550	Advanced Proposal Writing	3
Total Credits		0

Justification for request

The changes to the MS degree are the result of a lengthy curricular review involving internal and external reviewers. The goal is to make the MS degree more accessible and attractive to potential students, while strengthening it by making clear distinctions between undergraduate (3000 and 4000-level) and graduate courses.

Supporting Documents

Course Reviewer Comments

ershenb (01/27/20 2:22 pm): updated start term

## **New Experimental Course Proposal**

Date Submitted: 01/30/20 5:13 pm

**Viewing: BIO SCI 4001.007: Freshwater Ecology Laboratory** 

File: 4689

Last edit: 02/24/20 1:24 pm Changes proposed by: niyogid

Requested

Fall 2020

**Effective Change** 

Date

Department

**Biological Sciences** 

Discipline

Biological Sciences (BIO SCI)

Course Number

4001

Topic ID

007

Experimental

Freshwater Ecology Laboratory

Title

Experimental

FW Ecology Lab

Abbreviated Course Title

Instructors

D.K. Niyogi

Experimental

Catalog

Description

This lab course will include fieldtrips and lab work to collect and process samples related to the ecology of lakes and rivers. Samples of water and life will be collected from several aquatic ecosystems in Missouri, and analyzed in the lab for water quality, biological communities, and ecosystem processes.

Prerequisites

BioSci 4363 must be taken concurrently.

Field Trip

Statement

Local fieldtrips will be required as part of the this lab course.

**Credit Hours** 

LEC: 0

LAB: 1

IND: 0

RSD: 0

Total: 1

In Workflow

- 1. RBIOLSCI Chair
- 2. CCC Secretary
- 3. Sciences DSCC
  Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. CAT entry
- 8. Registrar

### Approval Path

- 01/30/20 5:43 pm
   David Duvernell
   (duvernelld):
   Approved for
   RBIOLSCI Chair
- 2. 01/31/20 9:30 am Brittany Parnell (ershenb):
  - Approved for CCC Secretary
- 3. 02/14/20 2:04 pm Katie Shannon (shannonk): Approved for Sciences DSCC
- Chair 4. 02/24/20 1:25 pm

Kristy Giacomelli-

Feys (kristyg):

Approved for Pending CCC

Agenda post

Justification for

new course:

This new offering will allow students the opportunity for experiential learning related to sampling and analysis in freshwater ecology.

Semester(s) none

previously taught

Co-Listed Courses:

Course Reviewer

Comments

Key: 4689

## **New Experimental Course Proposal**

Date Submitted: 01/29/20 11:55 am

**Viewing: CHEM ENG 5001.011: Chemical Engineering** 

# **Instrumentation using Microcontrollers**

File: 4687

Last edit: 03/03/20 2:25 pm Changes proposed by: luksc

Requested

Fall 2020

**Effective Change** 

Date

Department Chemical and Biochemical Engineering

Discipline Chemical Engineering (CHEM ENG)

Course Number 5001

Topic ID 011

Experimental

Chemical Engineering Instrumentation using Microcontrollers

Title

Experimental

**ChE Instrumentation** 

Abbreviated

Course Title

Instructors Christi Luks

Experimental

Catalog

Description

Students will learn the basics of programming micro-controllers such as Arduino and Raspberry Pi and use that to build instruments that can control chemical engineering

applications.

Prerequisites

Chem Eng 3111 or instructor permission.

Field Trip

Statement

Credit Hours LEC: 0 LAB: 1 IND: 0 RSD: 0 Total: 1

Justification for new course:

Students on the Chem-E-Car team have an expressed interest in this and it is a natural next step after the ChemEng 3111 course. The starting application will be to

In Workflow

- 1. RCHEMENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. CAT entry
- 8. Registrar

### Approval Path

1. 02/01/20 11:38

am

Joseph Smith (smithjose):
Approved for

RCHEMENG Chair

2. 02/03/20 3:36 pm Brittany Parnell

(ershenb):

Approved for CCC

Secretary

3. 02/26/20 12:08

pm

Stephen Raper

(sraper):

Approved for

Engineering DSCC

Chair

build a spectrophotometer. The students will work on a project of their choice after

that.

Semester(s)

n/a

previously taught

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4687

## **New Experimental Course Proposal**

Date Submitted: 01/30/20 11:00 am

**Viewing: CHEM ENG 5001.012: Senior Assessment Review** 

File: 4688

Last edit: 03/03/20 2:26 pm Changes proposed by: luksc

Requested Fall 2020

**Effective Change** 

Date

Department Chemical and Biochemical Engineering

Discipline Chemical Engineering (CHEM ENG)

Course Number 5001

Topic ID 012

Experimental Senior Assessment Review

Title

Experimental Senior Assessment Review

Abbreviated Course Title

Instructors Peter Ryan, Christi Luks

Experimental

Catalog

Description

This course will prepare students for their senior assessment exam. Topics typically covered on the NCEES Fundamentals of Engineering (FE) exam for chemical engineers will be covered.

Prerequisites

Senior standing

Field Trip Statement

Credit Hours LEC: 1 LAB: 0 IND: 0 RSD: 0 Total: 1

Justification for

This course will help increase the pass rate on the FE exam

new course:

In Workflow

- 1. RCHEMENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. CAT entry
- 8. Registrar

#### Approval Path

1. 02/01/20 11:37

am

Joseph Smith (smithjose):
Approved for

RCHEMENG Chair

2. 02/03/20 3:31 pm Brittany Parnell

(ershenb):

Approved for CCC

Secretary

3. 02/26/20 12:08

pm

Stephen Raper

(sraper):

Approved for

Engineering DSCC

Chair

Semester(s)

previously taught

Co-Listed

Courses:

Course Reviewer

Comments

Key: 1688

### **New Experimental Course Proposal**

Date Submitted: 02/20/20 5:19 pm

**Viewing: COMP ENG 6001.002: Adaptive Resonance Theory and** 

# **Applications**

File: 4691

Last edit: 03/03/20 2:26 pm Changes proposed by: stanleyj

Requested

Fall 2020

**Effective Change** 

Date

Department Electrical and Computer Engineering

Discipline Computer Engineering (COMP ENG)

Course Number 6001

Topic ID 002

Experimental

Adaptive Resonance Theory and Applications

Title

Experimental

Adapt Res Theory

Abbreviated

Course Title

Instructors Donald Wunsch

#### Experimental

#### Catalog

### Description

This course will cover advanced topics in adaptive resonance theory (ART), including clustering, biclustering, supervised learning, reinforcement learning, and a variety of image and data analysis techniques built on ART. Students will also encounter case studies of the predictive power of ART and related theories regarding learning mechanisms.

#### Prerequisites

A graduate course in neural networks, clustering, neuroscience or computational intelligence, and strong aptitude for and interest in original research.

Field Trip

Statement

#### In Workflow

- 1. RELECENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. CAT entry
- 8. Registrar

#### **Approval Path**

- 1. 02/20/20 7:44 pm Daryl Beetner (daryl): Approved
  - for RELECENG
  - Chair
- 2. 02/24/20 12:56

pm

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC

Secretary

3. 02/26/20 12:09

pm

Stephen Raper

(sraper):

Approved for

**Engineering DSCC** 

Chair

4. 02/26/20 1:09 pm Kristy Giacomelli-

Feys (kristyg):

Rollback to

Engineering DSCC

Credit Hours LEC: 3 LAB: 0 IND: 0 RSD: 0 Total: 3

Justification for

new course:

This topic is attracting thousands of papers and has been applied successfully in many applications, but we have no course like it. A recent survey of innovative publications in ART is:

Leonardo Enzo Brito da Silva, Islam Elnabarawy and Donald C. Wunsch II, "A Survey of Adaptive Resonance Theory Neural Network Models for Engineering Applications," Neural Networks Special Issue In Honor of the 80th Birthday of Stephen Grossberg, Vol.120, December 2019, pp. 167-210. DOI: 10.1016/j.neunet.2019.09.012

Semester(s)

none

previously taught

Co-Listed

Courses:

Course Reviewer

kristyg (02/26/20 1:09 pm): Rollback: Rollback per request of Steve Raper

Comments

Chair for Pending
CCC Agenda post
5. 03/03/20 2:16 pm
Stephen Raper
(sraper):
Approved for
Engineering DSCC
Chair

Key: 4691

### **New Experimental Course Proposal**

Date Submitted: 02/21/20 3:56 pm

**Viewing: ELEC ENG 5001.007: Process Control System Safety,** 

# **Security and Alarms**

File: 4692

Last edit: 03/03/20 2:27 pm Changes proposed by: kte

Requested Fall 2020

**Effective Change** 

Date

Department Electrical and Computer Engineering

Discipline Electrical Engineering (ELEC ENG)

Course Number 5001

Topic ID 007

Experimental

Process Control System Safety, Security and Alarms

Title

Experimental

Proc Cont Safe Secur Alm

Abbreviated

Course Title

Instructors Kelvin Erickson

Experimental

Catalog

Description

Lifecycle approach for industrial automation in the context of IEC 61511 (safety) and IEC 62443 (IACS cybersecurity) standards. Functional safety and cybersecurity fundamentals for risk analysis, safety/ cybersecurity requirements, inherently safer/secure design techniques, SIL/SL verification, operations, real-world cybersecurity attacks, alarm management.

Prerequisites

Elec Eng 3340 or Chem Eng 4110

Field Trip No field trips

Statement

Credit Hours LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

#### In Workflow

- 1. RELECENG Chair
- 2. CCC Secretary
- 3. Engineering DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. CAT entry
- 8. Registrar

#### Approval Path

1. 02/21/20 4:19 pm Daryl Beetner

(daryl): Approved for RELECENG

Chair

2. 02/24/20 12:56

pm

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC

Secretary

3. 03/03/20 2:16 pm

Stephen Raper

(sraper):

Approved for

Engineering DSCC

Chair

ELEC ENG 5001.007: Process Control System Safety, Security and Alarms

Justification for

3/3/2020

new course:

Subject matter that is important to those in the field of process control and factory automation. This course will be taught online, using existing courses or parts of courses already offered online by Exida in these subject areas. The S&T instructor will coordinate the course, but the content will be taught by Exida engineers.

Semester(s)

Fall 2019

previously taught

Co-Listed

CHEM ENG 5001 - Special Topics

Courses:

Course Reviewer
Comments

Key: 4692