Course Change Request

New Course Proposal

Date Submitted: 08/16/17 11:16 am


Last edit: 08/18/17 8:43 pm

Changes proposed by: d-witt

<table>
<thead>
<tr>
<th>Faculty Senate Number</th>
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<tr>
<td></td>
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<table>
<thead>
<tr>
<th>Contact(s)</th>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Donna Witt</td>
<td><a href="mailto:d-witt@tamu.edu">d-witt@tamu.edu</a></td>
<td>979-845-7616</td>
</tr>
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<table>
<thead>
<tr>
<th>Course prefix</th>
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<tbody>
<tr>
<td>Course number</td>
<td>680</td>
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<table>
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<tr>
<th>Department</th>
<th>Animal Science</th>
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<tbody>
<tr>
<td>College/School</td>
<td>Agriculture &amp; Life Sciences</td>
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<table>
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<tr>
<th>Effective term</th>
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<table>
<thead>
<tr>
<th>Complete Course Title</th>
<th>Applied Concepts of Meat Animal Myology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviated Course Title</td>
<td>APPL CONCEPTS MEAT MYOLOGY</td>
</tr>
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<table>
<thead>
<tr>
<th>Catalog course description</th>
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<tbody>
<tr>
<td>Introduction to fundamental concepts of meat animal myology as they pertain to industrial meat science; standard formats for scientific nomenclature in the context of meat science and industry related terminology; fabricated cuts used to illustrate myology concepts.</td>
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<table>
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<tr>
<th>Prerequisites and Restrictions</th>
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<tr>
<td>Graduate classification.</td>
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<th>Concurrent Enrollment</th>
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<table>
<thead>
<tr>
<th>Should catalog prerequisites / concurrent enrollment be enforced?</th>
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<table>
<thead>
<tr>
<th>Crosslistings</th>
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<tr>
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<table>
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<tr>
<td>(per week): Contact Hour(s)</td>
<td>2</td>
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<td>Total: Lecture</td>
<td>2</td>
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<tr>
<td>Lab:</td>
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<td>Other:</td>
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<td>Total:</td>
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<th>Repeatable for credit?</th>
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<tr>
<td>Three-peat?</td>
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<tr>
<td>Alternate Grade Modes</td>
<td>Satisfactory/Unsatisfactory</td>
</tr>
<tr>
<td>Method of instruction</td>
<td>Lecture and Laboratory</td>
</tr>
</tbody>
</table>

| Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education) | No |

<table>
<thead>
<tr>
<th>In Workflow</th>
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</thead>
<tbody>
<tr>
<td>1. ANSC Department Head</td>
</tr>
<tr>
<td>2. Curricular Services Review</td>
</tr>
<tr>
<td>3. AG Committee</td>
</tr>
<tr>
<td>4. AG Committee Chair</td>
</tr>
<tr>
<td>5. AG College Dean GR</td>
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<tr>
<td>6. GC Preparer</td>
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<td>7. GC Chair</td>
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<td>8. Faculty Senate Preparer</td>
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<td>9. Faculty Senate</td>
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<td>10. Provost II</td>
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<tr>
<td>11. President</td>
</tr>
<tr>
<td>12. Curricular Services</td>
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<tr>
<td>13. Banner</td>
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<table>
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<tr>
<th>Approval Path</th>
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<tbody>
<tr>
<td>1. 08/16/17 11:19 am Wes Osburn (osburnw): Approved for ANSC Department Head</td>
</tr>
<tr>
<td>2. 08/18/17 8:43 pm Sandra Williams (sandra-williams): Approved for Curricular Services Review</td>
</tr>
<tr>
<td>3. 08/21/17 8:32 am Dawn Kerstetter (dkerstetter): Approved for AG Committee Preparer GR</td>
</tr>
<tr>
<td>4. 09/14/17 10:15 am David W. Reed (dwreed): Approved for AG College Dean GR</td>
</tr>
<tr>
<td>5. 09/14/17 10:39 am LaRhesa Johnson (lrjohnson): Approved for GC Preparer</td>
</tr>
<tr>
<td>6. 09/25/17 8:27 am LaRhesa Johnson (lrjohnson): Approved for GC Chair</td>
</tr>
<tr>
<td>7. 10/05/17 3:03 pm LaRhesa Johnson (lrjohnson): Approved for GC Chair</td>
</tr>
</tbody>
</table>
Will this course be taught as a distance education course? No
Is 100% of this course going to be taught in Texas? Yes
Will classroom space be needed for this course? Yes

This will be a required course or an elective course for the following programs:

- Required (select program)
- Elective (select program)

<table>
<thead>
<tr>
<th>Program(s)</th>
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</thead>
<tbody>
<tr>
<td>(MS-ANSC) Master of Science in Animal Science</td>
</tr>
<tr>
<td>(MAG-ANSC) Master of Agriculture in Animal Science</td>
</tr>
<tr>
<td>(PHD-ANSC) Doctor of Philosophy in Animal Science</td>
</tr>
</tbody>
</table>

**Course Syllabus**

- Syllabus: Upload syllabus
- Letters of support or other documentation: No
- Additional information:
- Reported to state?: Add
Course title and number  ANSC 680 – Applied Concepts of Meat Animal Myology  
Term  Fall 2017  
Meeting times and location  
M 10:20 – 12:20 MSTC 100  
W 9:10 – 11:10 KLCT 400  

Course Description and Prerequisites  
Introduction to fundamental concepts of bovine myology as they pertain to industrial meat science. Standard formats for scientific nomenclature is presented in the context of meat science and industry related terminology. Fabricated cuts are used to illustrate myology concepts. Graduate-level course.

Student Learning Outcomes  
1. Mastery of basic morphological nomenclature relevant to the meat industry.  
2. Understanding of skeletal, joint, and muscle morphological concepts.  
3. Recognition of key muscles in fabricated beef cuts.

Instructor Information  
Name  Davey B. Griffin  
Telephone number  979-845-6489  
Email address  dgriff@tamu.edu  
Office location  348 Kleberg  
Name  Ashley N. Arnold  
Telephone number  979-862-3643  
Email address  a.arnold@tamu.edu  
Office location  120 Rosenthal

Textbook and/or Resource Material  
To be determined  

Grading Policies  
Grades will be computed on the basis of 400 total points.  
(A = 360 to 400 points; B = 320 to 359; C = 280 to 319, D = 240 to 279, F = less than 240).

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>100</td>
</tr>
<tr>
<td>Exam 2</td>
<td>100</td>
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<tr>
<td>Exam 3</td>
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</tr>
<tr>
<td>Quizzes</td>
<td>100</td>
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<tr>
<td>Total</td>
<td>400</td>
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Attendance and Make-up Policies  
If an absence is excused, the instructor will either provide the student an opportunity to make up any quiz, exam or other work that contributes to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor.

The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for the absence. A list of university-excused absences can be found at: studentrules.tamu.edu/rule07. The fact that these are university-excused absences does not relieve the student of responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code.
Course Topics, Calendar of Activities, Major Assignment Dates

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday 10:20 – 12:20</th>
<th>Wednesday 9:10-11:10</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug 28 Introduction and Objectives</td>
<td>Aug 30 Anatomy Directional Terms Anatomy of bones and bone growth</td>
</tr>
<tr>
<td>2</td>
<td>Sept 4 Quiz 1 Osteology – Bovine Axial Skeleton</td>
<td>Sept 6 Osteology – Bovine Axial Skeleton</td>
</tr>
<tr>
<td>3</td>
<td>Sept 11 Quiz 2 Osteoarthrology – Bovine Joints</td>
<td>Sept 13 Osteology – Bovine Forelimb</td>
</tr>
<tr>
<td>4</td>
<td>Sept 18 Quiz 3 Osteology – Bovine Lower Forelimb</td>
<td>Sept 20 Osteology – Bovine Hindlimb</td>
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<tr>
<td>5</td>
<td>Sept 25 Quiz 4 Osteology – Bovine Hindlimb</td>
<td>Sept 27 Exam 1</td>
</tr>
<tr>
<td>6</td>
<td>Oct 2 Intro to Myology</td>
<td>Oct 4 Bovine forequarter myology - extrinsic</td>
</tr>
<tr>
<td>7</td>
<td>Oct 9 Quiz 5 Bovine forequarter myology - intrinsic</td>
<td>Oct 11 Bovine forequarter myology - medial</td>
</tr>
<tr>
<td>8</td>
<td>Oct 16 Quiz 6 Bovine forequarter myology</td>
<td>Oct 18 Bovine myology - epaxial</td>
</tr>
<tr>
<td>9</td>
<td>Oct 23 Quiz 7 Bovine forequarter myology</td>
<td>Oct 25 Exam 2</td>
</tr>
<tr>
<td>10</td>
<td>Oct 30 Bovine myology – hypaxial/abdominal</td>
<td>Nov 1 Bovine hindquarter myology</td>
</tr>
<tr>
<td>11</td>
<td>Nov 6 Quiz 8 Bovine hindquarter myology</td>
<td>Nov 8 Bovine hindquarter myology</td>
</tr>
<tr>
<td>12</td>
<td>Nov 13 Quiz 9 Bovine hindquarter myology</td>
<td>Nov 15 Bovine hindquarter myology</td>
</tr>
<tr>
<td>13</td>
<td>Nov 20 Lymph Nodes, Tonsils &amp; Dental Aging</td>
<td>Nov 22 Reading Day – No Class</td>
</tr>
<tr>
<td>14</td>
<td>Nov 27 Quiz 10 Lymph Nodes, Tonsils &amp; Dental Aging</td>
<td>Nov 29 Exam 3</td>
</tr>
<tr>
<td>15</td>
<td>Dec 4 Redefined Day – Friday class</td>
<td>Dec 6 Last Day of Class</td>
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<tr>
<td>16</td>
<td>Dec 8-13 Final exams</td>
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Americans with Disabilities Act (ADA)
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit [http://disability.tamu.edu](http://disability.tamu.edu).

Academic Integrity
For additional information please visit: [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu)

“An Aggie does not lie, cheat, or steal, or tolerate those who do.”
Course Change Request

New Course Proposal

Date Submitted: 07/18/17 5:23 pm

Viewing: BMEN 643 : Risk Based Development and Testing of Medical Devices

Last edit: 07/25/17 10:33 am

Changes proposed by: mlyons

Programs referencing this course

CERT-CG45: Quality Engineering for Regulated Medical Technologies - Certificate
CERT-CU47: Quality Engineering for Regulated Medical Technologies - Certificate

Faculty Senate Number

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria Lyons</td>
<td><a href="mailto:mlyons@tamu.edu">mlyons@tamu.edu</a></td>
<td>979-845-2312</td>
</tr>
</tbody>
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Course prefix: BMEN  
Course number: 643

Department: Biomedical Engineering
College/School: College of Engineering
Academic Level: Graduate
Effective term: 2018-2019

Complete Course Title
Risk Based Development and Testing of Medical Devices

Abbreviated Course Title
RISK BASED DEVL TEST MED DEV

Catalog course description
Focus on the detailed design and development phases of the design innovation process for healthcare applications; includes medical device development projects in which teams will work on innovative medical devices that progressed through the concept phase of the development life cycle; includes detailed design and development, risk based design process, including the conduct of hazards analysis, design FMEA, application FMEA, process FMEA, device manufacturing, device testing and FDA design verification and validation.

Prerequisites and Restrictions
Enrolled in master of engineering in biomedical engineering; graduate classification or approval of instructor.

Concurrent Enrollment
No

Should catalog prerequisites / concurrent enrollment be enforced?
No

Crosslistings
No Crosslisted With

Stacked
No Stacked with

Semester Credit Hour(s)
3  
Credit Hour(s)
3  
Lecture: 3  
Lab: 0  
Other: 0  
Total: 3

Repeatable for credit?
No

Three-peat?
No

CIP/Fund Code
1405010006

In Workflow
1. BMEN Department Head
2. Curricular Services Review
3. EN Committee Preparer GR
4. EN Committee Chair GR
5. EN College Dean GR
6. GC Preparer
7. GC Chair
8. Faculty Senate Preparer
9. Faculty Senate
10. Provost II
11. President
12. Curricular Services
13. Banner

Approval Path
1. 07/18/17 5:46 pm
   Anthony Guiseppi (guiseppi): Approved for BMEN Department Head
2. 07/25/17 10:35 am
   Sandra Williams (sandra-williams): Approved for Curricular Services Review
3. 09/04/17 11:01 am
   Jennifer Veracruz (jveracruz): Approved for EN Committee Preparer GR
4. 09/15/17 4:18 pm
   Prasad Enjeti (enjeti): Approved for EN Committee Chair GR
5. 09/15/17 4:25 pm
   Prasad Enjeti (enjeti): Approved for EN College Dean GR
6. 09/25/17 8:27 am
   LaRhesa Johnson (lrjohnson): Approved for GC Preparer
7. 10/05/17 3:03 pm
   LaRhesa Johnson (lrjohnson): Approved for GC Chair

https://nextcatalog.tamu.edu/courseleaf/courseleaf.cgi?page=/courseadmin/17970/index.htm...
Default Grade Mode: Letter Grade (G)  
Alternate Grade Modes: Satisfactory/Unsatisfactory  
Method of instruction: Lecture  
Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)  
Yes  
Will this course be taught as a distance education course?  
No  
Is 100% of this course going to be taught in Texas?  
Yes  
Will classroom space be needed for this course?  
Yes  
This will be a required course or an elective course for the following programs:

<table>
<thead>
<tr>
<th>Required (select program)</th>
<th>Program(s)</th>
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<tbody>
<tr>
<td>(MEN-BMEN) Master of Engineering in Biomedical Engineering</td>
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<tr>
<td>(PHD-BMEN) Doctor of Philosophy in Biomedical Engineering</td>
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</table>

**Course Syllabus**

- **Syllabus:** Upload syllabus  
  - **Upload syllabus:** [Risk Based Development & Testing of Medical Devices.docx](https://nextcatalog.tamu.edu/courseleaf/courseleaf.cgi?page=/courseadmin/17970/index.html)

- **Letters of support or other documentation:** No

- **Additional information:** Similar content taught as BMEN 689 Bioinnovation II in 201631.

- **Reviewer Comments:**  
  - Sandra Williams (sandra-williams) (07/14/17 7:57 am): Made edits to prerequisites.  
  - Sandra Williams (sandra-williams) (07/14/17 8:00 am): Rollback: Course number missing from syllabus; missing link to student rule 7.  
  - Sandra Williams (sandra-williams) (07/25/17 10:35 am): Update received.

- **Reported to state?**

**Key:** 17970
Course title and number: **BMEN 643: Risk Based Development & Testing of Medical Devices**

Term (e.g., Fall 200X): **Fall 2018**

Meeting times and location: **Tuesdays 5:00-8:00 PM**

**Course Description and Prerequisites**

This graduate level medical device development course covers the detailed design & development phase of the design innovation process for healthcare applications. The course is built around medical device development projects (experiential learning) where teams will be formed in class to work on new and innovative medical devices that progressed through the concept phase of the development life cycle. Graduate student teams in this course will work on Detailed Design & Development, Risk Based Design Process including the conduct of Hazards Analysis, Design FMEA, Application FMEA, and Process FMEA, Device Manufacturing, Device testing, and FDA Design Verification and Validation (DV&V) strategies, in order to complete verification and validation of a medical device, and complete the enablement process for provisional patent applications, as well as the finalization of a FDA Design History File (DHF), and Device Master Record (DMR).

**Prerequisites for course:**

1. Enrolled in Master of Engineering program in Biomedical Engineering,

   or

2. Graduate standing in engineering (any discipline) – this requires permission of instructor

**Learning Outcomes or Course Objectives**

At the end of this course students will be able to:

1. Develop, document and present a detailed and risk mitigated engineering design for a device
2. Apply formal engineering design methods to
   a. Develop full and detailed Design Inputs and Specifications documents
   b. Identify basic components and/or systems required to perform desired function(s)
   c. Establish/identify engineering design criteria (Design for Function - DFF)
   d. Identify critical failure modes at systems and component level.
   e. Identify and apply engineering design & analysis of components/systems
   f. Conduct preliminary Hazards Analysis and risk analyses using FMEA techniques.
   g. Develop a comprehensive risk mitigation and Device Verification & Validation Test (DVT) Strategy in conformance with FDA requirements
   h. Apply appropriate material and manufacturing methods to build engineering prototypes of devices
   i. Test functionality of device designs
   j. Conduct a Design Review (DR) and make recommendations to mitigate failures
   k. Document engineering design process in a Design Control framework in a Design History File (DHF)
Instructor Information

Name: Dr. Balakrishna Haridas, PhD | Professor of Practice | Biomedical Engineering
Telephone number: 979-845-3348 (O), 513-235-7861 (C)
Email address: bharidas@tamu.edu
Office hours: Thursdays 3:00-5:00 PM
Office location: ETB 5014

Textbook and/or Resource Material

Reference Texts:
Biodesign: The Process of Innovating Medical Technologies by Stefanos Zenios, Josh Makower, Paul Yock and Todd J. Brinton.

Grading Policies

Students will be assessed both as individuals as well as on a team. It is possible to fail this course with poor individual grades and high team grades and vice versa. The following lists what is assessed whether it is an Individual (I) grade, Team grade (T) and its weight.

- Design Notebook (I) 20%
- Design Requirements & Specifications (T) 10%
- Risk Management (T) 15%
  - Risk management plan
  - Hazards Analysis
  - Design FMEA
- Design Verification/Validation Strategy (T) 15%
- Engineering & Manufacturing Prototype/s (T) 15%
- Design History file (T) 15%
- Design Reviews (T) 10%

The following grading scale will be used.
A = 100-90%  B = 89-80%  C = 79-70%  D = 69-60%  F = 59-0%
<table>
<thead>
<tr>
<th>Week*</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 30</td>
<td>Review of the detailed design &amp; development process. FDA Design Controls training; Assignment of projects/formation of teams. &lt;br&gt; HWK: Review assigned readings. Teams to review project information, complete background research and start drafting the requirements document using the posted template.</td>
</tr>
</tbody>
</table>

| Sep 6 | Review example Design development plan (DDP), Work on User needs & Design Inputs requirements /specifications development (30 min). Desk Reviews (30 min per team) <br> HWK: Teams to develop Design Requirements Phase 1 Review. |

| Sep 13 | **Phase 1A Review** – User Needs & Design Input Requirements <br> **Teams to present Design Requirements Document to rest of class.** |

| Sep 20 | No Class: BH out of town. <br> Work in class on project as well as outside of class. <br> HWK: Detailed Design of Device |

| Sep 27 | Lecture: Risk Management/Preliminary Hazards Analysis/DFMEA; <br> HWK: Application of methods to assigned project; design work to continue; start thinking of manufacturing as well. |

| Oct 4 | Desk Reviews: Detailed Design of device | Review of DFMEA) on device designs <br> HWK: Application of methods to assigned project; design work to continue; start thinking of manufacturing as well. |

| Oct 11 | **Phase 1B Review**: Intended Use Risk Assessment & Preliminary Hazards Analysis <br> **Teams to present PHA to class** |

| Oct 18 | Desk Reviews <br> Detailed Design of device; Complete Risk Analysis (DFMEA) on device designs <br> HWK: Prepare and Finalize Detailed Design & DFMEA <br> Complete Mid Term Team Feedback Form (Confidential Peer Review) |

| Oct 25 | **Phase 2 Review** – Detailed Design and DFMEA <br> **Teams to Present Detailed Design & DFMEA** |

| Nov 1 | Lecture: V&V planning; connecting Design Inputs and Risk analysis to drive DV&V. <br> Desk Reviews <br> HWL: Engineering prototyping using advanced manufacturing methods (outside class) |

| Nov 8 | Lecture: V&V Case Study Presentation (Invited Speaker- Tony Boyle) <br> Desk Reviews: Continue Detailed Design, V&V planning; connecting Design Inputs and Risk analysis to drive DV&V. <br> HWK: Engineering prototyping using advanced manufacturing methods (outside class) |

| Nov 15 | Desk Reviews: <br> HWK: Test/Demonstrate Engineering Prototype in an appropriate test bed/environment. |

| Nov 22 | Software Requirements, Verification, and Validation Lecture <br> Manish Ahuja, Director of Engineering, Biotex |

| Nov 29 | **Phase 3: Final Design Review** <br> **Team to Present detailed design, manufacturing instructions, functional test results, & V&V strategy.** |

| Dec 6 | **FINALS WEEK**: Submit Final DHFs (binders and ecopy on flash drive), Prototypes, Videos of Device Operation, Lab Notebooks by 5 PM Dec 6, 2016 <br> Complete Final Team Feedback Form (Confidential Peer Review) |
Design Notebook Requirements
You are required to maintain a design notebook. This notebook should be bound with numbered pages. Please see example in class. Any work with regards to your design project should be documented in this notebook. For example, if you search the web, then list the web sites you visited and why you visited them, what you learned etc. All of this information will be necessary when you write your design history file. A typical lab notebook can be found here...

https://www.amazon.com/gp/product/B000084QUG/ref=s9_top_hd_bw_bXDB63_p229_i2?pf_rd_m=ATVPDKIKX0DER&pf_rd_s=merchandised-search-4&pf_rd_r=DDVBTV7YR1PTXMG41AND&pf_rd_t=101&pf_rd_p=1ced8cd9-8256-5050-9e42-f26a3060e271&pf_rd_i=490760011

The following rules are employed because they establish the integrity of the content of the notebook when it is used by courts in deciding priority dates between competing patent applications.

1. Sign pages and have them witnessed: documents authorship,
2. Date pages: documents entry date,
3. Use bound notebook with sequentially numbered pages: assures that material was not added at a later date,
4. Do not leave blank pages for later use: assures material was not added at a later date,
5. Place a line through unused portion at bottom of each page: assures material was not added at a later date,
6. Use non-erasable ink: excludes the possibility material was changed at a later date.
   a. The following rules help assure that the information in the notebook is complete.
7. Record results directly into the notebook,
8. Record any thoughts or questions generated as a result of development activities.
9. Permanently attach copies of important loose materials directly to notebook pages,
   a. The following rules are employed to make it easy for another person to use the notebook.
10. Put a table of contents at the start of the notebook,
11. Use continued from page ___ and continued on page ___ on non-consecutively numbered continuations,
12. Include an explanation of all non-standard abbreviations and acronyms.
   a. The following rules make it possible for another person with a similar scientific background to understand and duplicate your work.
13. Describe the purpose of experiments.
14. Describe the equipment used, including manufacturer, model number and serial number and the last calibration date.
15. Document all chemical and other supplies you used that might affect the outcome. Include manufacturer and lot numbers.
16. Describe the methods and procedures used.
17. Record all your observations and measurements in the notebook.
18. Perform calculations in the notebook. If there is a calculation that is repeated many times on data, provide a sample calculation.
19. Indicate the units of all numbers.

Tips for Notebook:
- DO bring your notebook to all classes and take notes.
- DO record any questions, thoughts, etc. you have concerning the design project.
- DO record any concepts...do have original thought.
- DO NOT give me only a status report but tell me WHY you are doing, deciding, and/thinking throughout the project.
- DO NOT write one paragraph and then cross out an entire page....this is wasteful and unnecessarily kills trees.

Design Concepts/Models/Prototyping Resources and Requirements
Each team is responsible for producing fully functional engineered prototypes of their designs which meets the requirements and risk analysis. The department of biomedical engineering will provide all teams with access to prototyping resources and materials. Prototypes have to be engineered and should work! Crude form based prototypes that don’t work will not be accepted in this class.

Design History File Requirements
You are required to work as a team to generate a final organized, well documented file which includes all research, planning, concepts, and evaluation results. This file should be in both typewritten and digital formats. The team is responsible for publishing this report for each team member, professor, and supporting clinician/s.

The DHF’s are published in a binder with an accompanying USB flash drive. The flash drive should contain all original files of any images, drawings or 3D models. Please see end of this document for detailed instructions.

Design Reviews
There will be four (4) design reviews per semester as indicated on the schedule; Please be prepared to provide your design history file to date, prototypes and a brief presentation on the project status. The purposes of these reviews are to identify areas of concern and assist in team decision making. Grade will be based on content presented, professionalism, prototypes, DHF, and progress. (See more detailed criteria below)

Class Norms
1. Team Participation – Students are expected to support team goals and workload equally. If teaming issues occur please first try to work out differences with your teammate and contact Dr. Haridas for further assistance. Your teammates will rely on you do complete your task. Partnering is about what you can do for others to make them successful. The more successful your teammates are, the more successful you will be.
2. Consideration of Peers & Presenters – Students are expected to show respect for peers and presenters at all times.
4. Design Reviews - Outside engineers, physicians, or business personnel will be attending these reviews. These professionals are volunteering their time to assist you. You are expected to represent your team’s effort professionally and dress appropriately.
5. Support - All professors are dedicated to supporting your efforts in making your projects a success. Please seek assistance at any time through email or scheduled appointments.

Note on Class Participation
A typical class will consist of both class mini-lectures and team project work. During class lectures students show evidence of adequate preparation and engagement in the project activities (including interaction
collaborators, staying up to date on assigned and posted readings, and staying current with the information gathered from discussions with stakeholders. In addition, students should add to the discussion by providing relevant insights as well as personal examples that extend the class’ understanding of the concepts. During team sessions, students should contribute regularly showing completion of team assignments in a timely and professional manner.

Most managers, particularly general managers, spend very little time reading and even less time writing reports. The vast majority of their interactions are verbal. For this reason, emphasis in this class is devoted toward development of verbal skills. The classroom should be considered a laboratory in which you can test your ability to convincingly present your solution to a problem and your ability to achieve the desired results. Some of the things we’ll look for in effective class and team participation are:

1. Is the participant a good listener?
2. Are points made relevant to the discussion? Are they linked to the comments of others?
3. Do comments show evidence of preparation and comprehension of the assigned reading(s) and project requirements?
4. Do comments add to the understanding of the situation?
5. Is there a willingness to participate regularly and frequently?
6. Is there a willingness to test new ideas or are all comments "safe"?
7. Is the participant willing to interact with other class members?
8. Do comments clarify and highlight the important aspects of earlier comments and lead to a clear statement of the concepts being covered?

Both process and content considerations will be used in evaluating the class participation component of your grade. Students sometimes complain at the end of the term that they had their hands raised and were not called upon frequently enough during the term. If you think this is happening to you, it is your responsibility to let the instructor know as early as possible in the term so that she can focus more attention on you. I will not always call on a student every time their hand is raised so you must be thoroughly prepared for each class so that you have several contributions to make each class session. Please also note that your self-evaluation of class participation at the end of the term will be based on the same criteria listed above.

**Note of Team Feedback**

Each team member will be required to assess their teammate’s contribution to the success of the team. This peer to peer review will influence the team grade.

**Excused Absences:**

Refer to [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07) for ALL policies regarding excused absences.

**Americans with Disabilities Act (ADA)**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the
Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

**Academic Integrity**

For additional information please visit: http://aggiehonor.tamu.edu

“An Aggie does not lie, cheat, or steal, or tolerate those who do.”
Course Change Request

New Course Proposal

Date Submitted: 02/05/17 2:21 am

Viewing: CHEN 645: Fundamentals of Catalysis with Applications

Last edit: 10/05/17 3:00 pm
Changes proposed by: pia.grizzle

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pia Grizzle</td>
<td><a href="mailto:pia.grizzle@qatar.tamu.edu">pia.grizzle@qatar.tamu.edu</a></td>
<td>0000000000</td>
</tr>
</tbody>
</table>

Course prefix: CHEN  
Course number: 645

Department: Chemical Engineering  
College/School: Qatar Campus  
Academic Level: Graduate  
Effective term: 2017-2018 Qatar

Complete Course Title: Fundamentals of Catalysis with Applications

Abbreviated Course Title: FUNDAMENTALS CATALYSIS APPL

Catalog course description:
Principles of catalyst preparation, methods of characterization, catalyst deactivation and regeneration techniques; effect of physical transport processes on the rate of catalytic heterogeneous reactions; kinetics of heterogeneous reactions; laboratory and industrial reactors; application to selected industrial processes.

Prerequisites and Restrictions:
CHEN 354; CHEN 464 or approval of instructor.

Concurrent Enrollment: No

Should catalog prerequisites / concurrent enrollment be enforced?: No

Crosslistings: No  
Crosslisted With: CHEN 476 - Applied Catalysis

Stacked: Yes  
Stacked with: CHEN 476 - Applied Catalysis

Semester: 3  
Credit Hour(s): 3 (per week): Lecture: 3  
Lab: 0  
Other: 0

Repeatable for credit?: No

CIP/Fund Code: 1407010006  
Default Grade Mode: Letter Grade (G)

Method of instruction: Lecture

Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education): No

Will this course be taught as a distance education course?: No

In Workflow

1. CHEN Program Chair  
2. QT Dean  
3. CHEN Department Head  
4. Curricular Services Review  
5. EN Committee Preparer GR

6. EN Committee Chair GR

7. EN College Dean GR  
8. GC Preparer  
9. GC Chair  
10. Faculty Senate Preparer

11. Faculty Senate  
12. Provost II  
13. President  
14. Curricular Services  
15. Banner

Approval Path

1. 02/16/17 8:37 am  
   Patrick Linke (patrick.linke): Approved for CHEN Program Chair

2. 02/17/17 12:19 am  
   Troy Bickham (tbickham): Approved for QT Dean

3. 02/17/17 4:24 pm  
   Arul Jayaraman (arulj): Approved for CHEN Department Head

4. 02/21/17 9:04 pm  
   Sandra Williams (sandra-williams): Approved for Curricular Services Review

5. 03/29/17 11:45 am  
   Jennifer Veracruz (jveracruz): Approved for GC Preparer

6. 06/17/17 5:30 pm  
   Prasad Enjeti (enjeti): Approved for EN Committee Chair GR

7. 06/17/17 5:35 pm  
   Prasad Enjeti (enjeti): Approved for EN College Dean GR

8. 06/28/17 10:49 am  
   LaRhessa Johnson (lrjohnson): Approved for GC Preparer

9. 08/09/17 2:17 pm  
   LaRhessa Johnson (lrjohnson): Rollback to EN Committee Preparer GR for GC Chair

10. 09/04/17 11:01 am  
    Jennifer Veracruz (jveracruz): Approved for EN Committee Preparer GR
Is 100% of this course going to be taught in Texas? No
Will classroom space be needed for this course? Yes
This will be a required course or an elective course for the following programs:
- Required (select program)
- Elective (select program)
  - Program(s)
    - [MS-CHEN] Master of Science in Chemical Engineering
    - [MEN-CHEN] Master of Engineering in Chemical Engineering

**Course Syllabus**

| Syllabus: | Upload syllabus
| --- | ---
| Upload syllabus | CHEN 645 Spring 2018.pdf |
| Letters of support or other documentation | No |
| Additional information | My contact number is +974.4423.0291, if possible we would like to have this included in the 2017-2018 catalog. |
| Reviewer Comments | Sandra Williams (sandra-williams) (12/19/16 11:51 am): Form: Is this an elective or required course - what program? Syllabus: missing course number; missing link to student rule 7.
Sandra Williams (sandra-williams) (12/22/16 8:46 am): Rollback: Please submit updated syllabus to include link to student rule 7.
Sandra Williams (sandra-williams) (02/21/17 9:04 pm): Update received.
George Cunningham (gbcunningham) (07/05/17 8:03 pm): Make-up policy of 15 days does not seem congruent with 30 day timeline outlined in Student Rule 7.
LaRhesa Johnson (lrjohnson) (08/09/17 2:17 pm): Rollback: RB per Aug. GC due to comments not being addressed.
LaRhesa Johnson (lrjohnson) (10/05/17 3:00 pm): Syllabus updated.

Key: L7400
Prerequisites: CHEN 354; CHEN 464 or approval of instructor


Instructor: Professor D. B. Bukur, E-mail: dragomir.bukur@qatar.tamu.edu
Office: 219S; Telephone: 4423-0134

Class Schedule: UT 5:00-6:15 PM (Room 209)

Office hours: UT 3:00 – 4:00 PM (219S) or by appointment

Teaching Assistant: Arvin, Arugay, arvin.arugay@qatar.tamu.edu

Description: Principles of catalyst preparation, methods of characterization, catalyst deactivation and regeneration techniques. Effect of physical transport processes on the rate of catalytic heterogeneous reactions; kinetics of heterogeneous reactions. Laboratory and industrial reactors. Application to selected industrial processes.

Grading Policy:

The final grades will be determined based on two mid-term examinations, two course projects with class presentations, homework assignments and quizzes. The following weights will be used:

Two midterm exams (25% each) ................................................................. 50%
Quizzes ................................................................. 10%
Major Quiz on GTL ................................................................. 5%
Homework ................................................................. 15%
Two Projects and Class Presentation (10% each) ..................................... 20%

Final letter grades are expected to be distributed according to the following percentage scale:
A = 90–100%, B = 80–89%, C = 70–79%, D = 60–69%, F < 60%.

Midterm exams may be either closed book, or open book or combination of both.

Test (exam) dates: February 12, 2018; March 29, 2018
Major Quiz (GTL): Last week of the semester
Project 1: Week 7 Project 2: Week 13

No make-up exams or quizzes will be given unless a student provides evidence for a valid excused absence (see Student Rule 7 [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07) for examples of excused absences).
Homework:

Will be assigned on weekly basis. Unless otherwise stated, homework assignments are due one week from the time they are handed out. Late homework will not be graded and zero points will be assigned unless a student has a valid excused absence (see Student Rule 7 http://student-rules.tamu.edu/rule07 for examples of excused absences).

Quizzes:

Quizzes will be closed book and unannounced. They will cover the reading assignments and material covered in class. Zero points will be assigned if you miss a quiz without a valid excused absence (see Student Rule 7 http://student-rules.tamu.edu/rule07 for examples of excused absences).

Project:

Projects will be done individually. Written report will be required including list of references, and detailed discussion of material presented in slides and/or the topic in general (i.e. report may include material not covered by slides). Students should consult and submit electronic copies of at least five different references. Slides should be submitted one week in advance of scheduled presentation.

Class attendance and conduct:

- The university views class attendance as an individual student responsibility. Students are expected to attend class and to complete all assignments. You should make an effort to attend every class, take notes and study them before the next class period.
- Do come to class on time – late arrivals disturb the class and should be avoided.
- Talking in class during a lecture distorts the attention of fellow students. If you don’t understand the material or cannot read something ask me for clarifications, rather than a person sitting next to you.
- Eating and/or drinking are not permitted during lectures.

Make-up Policy

If an absence is excused, the instructor will either provide the student an opportunity to make up any quiz, exam or other work that contributes to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor. If the instructor has a regularly scheduled make up exam, students are expected to attend unless they have a university approved excuse. The make-up work must be completed in a timeframe not to exceed 30 calendar days from the last day of the initial absence.

The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for the absence. The fact that student was absent due to acceptable university-excused absence does not relieve the student of responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code.
In cases where prior notification is not feasible (e.g., accident or emergency) the student must provide notification by the end of the second working day after the absence, including an explanation of why notice could not be sent prior to the class.

Accommodations sought for absences due to the observance of a religious holiday can be sought either prior or after the absence, but not later than two working days after the absence.

Course Topics

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Importance of catalysis, Historical developments and major applications</td>
</tr>
<tr>
<td>1-3</td>
<td>Catalyst Materials and their Properties (active phase, support, promoters, molecular sieves); Physical and chemical properties</td>
</tr>
<tr>
<td>4-6</td>
<td>Fundamentals of Adsorption, Reaction and Diffusional Resistances, Kinetics of Surface Reactions; Effect of mass transfer on reaction kinetics</td>
</tr>
<tr>
<td>7</td>
<td>Reactor Design and Selection</td>
</tr>
<tr>
<td>8</td>
<td>Catalyst preparation</td>
</tr>
<tr>
<td>9</td>
<td>Catalyst characterization methods</td>
</tr>
<tr>
<td>10</td>
<td>Catalyst deactivation mechanisms and regeneration techniques</td>
</tr>
<tr>
<td>11-14</td>
<td>Applications: Gas-to-Liquids (GTL) technology</td>
</tr>
</tbody>
</table>

Academic Integrity

*For additional information please visit: [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu)*

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Americans with Disabilities Act (ADA) Policy Statement

The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Affairs in suite 318 of the Texas A&M University at Qatar building. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu)
Course Change Request

New Course Proposal

Date Submitted: 08/07/17 6:27 pm

Viewing: ENGR 640: Subsea Hardware Design

Last edit: 08/13/17 12:21 pm

Changes proposed by: jingram

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julie Ingram</td>
<td><a href="mailto:jingram@tamu.edu">jingram@tamu.edu</a></td>
<td>979-458-9811</td>
</tr>
</tbody>
</table>

Course prefix: ENGR, Course number: 640

Department: College of Engineering
College/School: College of Engineering
Academic Level: Graduate
Academic Level (alternate): Undergraduate

Effective term: 2018-2019

Complete Course Title:
Subsea Hardware Design

Abbreviated Course Title: SUBSEA HARDWARE DESIGN

Catalog course description:
Basic elements (bolting, seals, flanges & hubs, valves, fittings, connections, and actuators) that make up subsea hardware assemblies; understanding of how these elements work together in a system.

Prerequisites and Restrictions:
ENGR 630 or concurrent enrollment, or approval of instructor.

Concurrent Enrollment: No

Should catalog prerequisites / concurrent enrollment be enforced? Yes

Enforced Prerequisites / Concurrent Enrollment

<table>
<thead>
<tr>
<th>And/Or</th>
<th>Course Prefix/Number</th>
<th>Min Grade/Score</th>
<th>Academic Level</th>
<th>Concurrency?</th>
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<tbody>
<tr>
<td></td>
<td>ENGR 630</td>
<td>C</td>
<td>GR</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Crosslistings: No
Stacked: No

Semester: 3
Credit Hour(s): 3
Contact Hour(s) (per week): Lecture: 3, Lab: 0, Other: 0, Total: 3
Repeatable for credit: No

In Workflow

1. CLEN Department Head
2. Curricular Services Review
3. EN Committee Preparer GR
4. EN Committee Chair GR
5. EN College Dean GR
6. GC Preparer
7. GC Chair
8. Faculty Senate Preparer

Approval Path

1. 08/08/17 1:54 pm
   John Hurtado (jehurtado): Approved for CLEN Department Head

2. 08/13/17 12:21 pm
   Sandra Williams (sandra-williams): Approved for Curricular Services Review

3. 09/15/17 4:22 pm
   Jennifer Veracruz (jveracruz): Approved for EN Committee Preparer GR

4. 09/15/17 4:24 pm
   Prasad Enjeti (enjeti): Approved for EN Committee Chair GR

5. 09/15/17 4:25 pm
   Prasad Enjeti (enjeti): Approved for EN College Dean GR

6. 09/25/17 8:27 am
   LaRhesa Johnson (lrjohnson): Approved for GC Preparer

7. 10/05/17 3:03 pm
   LaRhesa Johnson (lrjohnson): Approved for GC Chair

Three-peat? No
CIP/Fund Code 1424010006
Default Grade Mode Letter Grade(G)
Alternate Grade Modes Satisfactory/Unsatisfactory
Method of instruction Lecture
Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)

Will this course be taught as a distance education course? Yes
I verify that I have reviewed the FAQ for Export Control Basics for Distance Education.

Is 100% of this course going to be taught in Texas? Yes
Will classroom space be needed for this course? Yes

This will be a required course or an elective course for the following programs:

<table>
<thead>
<tr>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(MEN-ENGR) Master of Engineering in Engineering</td>
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</tbody>
</table>

**Course Syllabus**

Syllabus: Use course syllabus form

<table>
<thead>
<tr>
<th>Meeting times and locations</th>
<th>TTH 2:20-3:35 ENPH 205</th>
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<table>
<thead>
<tr>
<th>Learning outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Outcome</td>
</tr>
<tr>
<td>1. Describe the role of hardware related industry standards (mainly API 17D).</td>
</tr>
<tr>
<td>2. Demonstrate how the basic elements function individually and as part of a system.</td>
</tr>
<tr>
<td>3. Evaluate hardware specifications and determine if the hardware is appropriate for a certain project requirement.</td>
</tr>
<tr>
<td>4. Identify the appropriate industry standards to use depending on the hardware characteristics.</td>
</tr>
</tbody>
</table>

Instructor information

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>E-mail</th>
<th>Office hours</th>
<th>Office location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julie Ingram</td>
<td>979-458-9811</td>
<td><a href="mailto:jingram@tamu.edu">jingram@tamu.edu</a></td>
<td>MW 12-1:30</td>
<td>EABB</td>
</tr>
</tbody>
</table>

Textbook and/or Resource Material

Industry Standards will be available in Course Reserves

Grading scale

| A = 90-100 |
| B = 80-89 |
| C = 70-79 |
| D = 60-69 |
| F = <60 |

Grading Policies

<table>
<thead>
<tr>
<th>Activity</th>
<th>Weight</th>
<th>How is grade determined</th>
<th>Additional work for graduate students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
<td>Problem Sets</td>
<td></td>
</tr>
<tr>
<td>Quizzes</td>
<td>20%</td>
<td>Online Quizzes</td>
<td></td>
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Attendance and Make-up Policies

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<tbody>
<tr>
<td>Project</td>
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<td>Results graded with rubric</td>
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</tr>
<tr>
<td>Midterm Exam</td>
<td>20%</td>
<td>Online Exam</td>
<td></td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
<td>Online Exam</td>
<td></td>
</tr>
</tbody>
</table>

University rules related to excused and unexcused absences are located on-line at Student Rule 7.

All students are required to attend the weekly in-class sessions (distance education students via online through Bb Collaborate and on campus students face to face) with the instructor. Be sure to actively participate by contributing to the discussion and asking any questions regarding the materials presented in the module/assignment. Distance education students are highly encouraged to check that your computer plug-ins and that your internet access are suited for this task prior to the first Bb Collaborate session using https://tamu.blackboard.com/webapps/bb-collaborate-BBLEARN/launchSession/guest?uid=56a401d3-7719-4304-8b7a-e3720931ee3d&course_id=_70129_1

Letter of support or other documentation: No

Additional information:

Reviewer Comments: Sandra Williams (sandra-williams) (08/13/17 12:21 pm): Updated course description and prerequisites to conform to catalog style guide for course descriptions.

Reported to state?

Key: 18012
Course Change Request

New Course Proposal

Date Submitted: 08/07/17 2:16 pm

Viewing: ENGR 642: Subsea Pipeline Design

Last edit: 08/13/17 12:26 pm

Changes proposed by: jingram

Contact(s)

<table>
<thead>
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<td>979-458-9811</td>
</tr>
</tbody>
</table>

Course prefix: ENGR  
Course number: 642

Department: College of Engineering
College/School: College of Engineering
Academic Level: Graduate
Academic Level (alternate): Undergraduate

Effective term: 2018-2019

Complete Course Title: Subsea Pipeline Design
Abbreviated Course Title: SUBSEA PIPELINE DESIGN

Catalog course description:
A practical view of pipeline project realization from concept selection through installation and offshore acceptance testing.

Prerequisites and Restrictions:
ENGR 430 or ENGR 630, or concurrent enrollment, or approval of instructor.

Concurrent Enrollment: No
Should catalog prerequisites / concurrent enrollment be enforced? Yes

Enforced Prerequisites / Concurrent Enrollment

<table>
<thead>
<tr>
<th>And/Or</th>
<th>Course Prefix/Number</th>
<th>Min Grade/Score</th>
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<td></td>
<td>ENGR 630</td>
<td>C</td>
<td>GR</td>
<td>)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Crosslistings: No  Crosslisted With
Stacked: No  Stacked with

Semester: 3
Credit Hour(s): 3
Contact Hour(s): 3
Lecture: 3
Lab: 0
Other: 0
Total: 3

Repeatable for credit? No
Three-peat? No
CIP/Fund Code 1424010006
Default Grade Mode Letter Grade(G)
Alternate Grade Modes Satisfactory/Unsatisfactory
Method of instruction Lecture
Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education) Yes
Will this course be taught as a distance education course? Yes
I verify that I have reviewed the FAQ for Export Control Basics for Distance Education. Yes
Is 100% of this course going to be taught in Texas? Yes
Will classroom space be needed for this course? Yes

This will be a required course or an elective course for the following programs:

<table>
<thead>
<tr>
<th>Required (select program)</th>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(MEN-ENGR) Master of Engineering in Engineering</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elective (select program)</th>
</tr>
</thead>
</table>

---

**Course Syllabus**

Syllabus: Use course syllabus form

| Meeting times and locations | MWF 1:50-2:40 Location ENPH 205 |

Learning outcomes

<table>
<thead>
<tr>
<th>Learning Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe the different line types used for infield flowlines and pipelines.</td>
</tr>
<tr>
<td>2. Explain the key decision drivers associated with field layout and route selection.</td>
</tr>
<tr>
<td>3. Explain how to apply metocean and operational loads in a pipeline design.</td>
</tr>
<tr>
<td>4. Explain how manufacturing process, transportation, and installation methodology drive a pipeline design.</td>
</tr>
<tr>
<td>5. Describe a typical inspection and maintenance plan for pipelines, including how they may vary depending on the project conditions.</td>
</tr>
<tr>
<td>6. Explain the pipeline project evolution, including key interfaces, from concept selection to offshore acceptance testing.</td>
</tr>
<tr>
<td>7. Plan and perform a preliminary pipeline design.</td>
</tr>
</tbody>
</table>

Instructor information

| Name | Julie Ingram | Phone | 979-458-9811 | E-mail | jingram@tamu.edu | Office hours | MW 12-1:30 | Office location | EABB |

Textbook and/or Resource Material

There is no textbook for this course. Class notes will be provided.

Grading scale

| A = 90-100 |
| B = 80-89 |
| C = 70-79 |
| D = 60-69 |
| F = <60 |

Grading Policies

| Activity | Weight | How is grade determined | Additional work for graduate students |

https://nextcatalog.tamu.edu/courseleaf/courseleaf.cgi?page=/courseadmin/18010/index.html... 10/30/2017
Attendance and Make-up Policies

Please select the appropriate ADA statement for your location

Texas A&M University - Main Campus

Americans with Disabilities Act (ADA)

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Academic Integrity

“An Aggie does not lie, cheat, or steal, or tolerate those who do.”

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Course Topics, Calendar of Activities, Major Assignment Dates

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<tr>
<th>Week</th>
<th>Topic</th>
<th>Required readings</th>
<th>Assignment due date</th>
<th>Major exam date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Pipelines and Flowlines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Field Lay-out and Route Selection</td>
<td>Thurs Jan 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td>Flexible Pipe</td>
<td>Thur Feb 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-6</td>
<td>Rigid Pipe Wall Thickness and Material Determination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-8</td>
<td>On-bottom Stability</td>
<td>Fri Mar 9</td>
<td>Wed Mar 7</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>External Corrosion Protection</td>
<td>Fri Mar 23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Free Spans</td>
<td>Fri Mar 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>High Pressure / High Temperature Considerations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Pipeline Pigging - Cleaning and Inspection</td>
<td>Fri Apr 13</td>
<td></td>
<td></td>
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<tr>
<td>13</td>
<td>Installation and Pre-commissioning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Review Week</td>
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<td></td>
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</tr>
</tbody>
</table>

activity | weight | how is grade determined | additional work for graduate students |
---|---|---|---|
Homework | 40% | Graded assignments composed of worked problem sets |  |
Midterm Exam | 15% | Online exam |  |
Quizzes | 25% | Online quizzes |  |
Final Exam | 20% | Online exam |  |

Letters of support or other documentation

No

Additional information

Sandra Williams (sandra-williams) (08/13/17 12:26 pm): Updated course description and prerequisites to conform to catalog style guide for course descriptions.

Reported to state?
# Course Change Request

## New Course Proposal

**Viewing:** ENGR 643 : Subsea Riser Design  
**Last edit:** 08/13/17 12:29 pm

Changes proposed by: jingram  
Faculty Senate Number

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julie Ingram</td>
<td><a href="mailto:jingram@tamu.edu">jingram@tamu.edu</a></td>
<td>979-458-9811</td>
</tr>
</tbody>
</table>

Course prefix: ENGR  
Course number: 643  
Department: College of Engineering  
College/School: College of Engineering  
Academic Level: Graduate  
Effective term: 2018-2019  
Complete Course Title: Subsea Riser Design  
Abbreviated Course Title: SUBSEA RISER DESIGN

**Catalog course description:**  
A practical view of riser project realization from concept selection through installation and offshore acceptance testing.

**Prerequisites and Restrictions:**  
Graduate classification; ENGR 430 or ENGR 630, or concurrent enrollment, or approval of instructor.

Concurrent Enrollment: No  
Should catalog prerequisites / concurrent enrollment be enforced? Yes

<table>
<thead>
<tr>
<th>And/Or</th>
<th>Course Prefix/Number</th>
<th>Min Grade/Score</th>
<th>Academic Level</th>
<th>Concurrency?</th>
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<tbody>
<tr>
<td>ENGR 630</td>
<td>B</td>
<td>GR</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Enforced Prerequisites / Concurrent Enrollment

**Crosslistings:**  
No  
Crosslisted With

**Stacked:**  
No  
Stacked with

Semester: 3  
Credit Hour(s): 3  
Contact Hour(s) (per week): Lecture: 3  
Lab: 0  
Other: 0  
Total: 3  
Repeatable for credit: No

## In Workflow

1. CLEN Department Head  
2. Curricular Services Review  
3. EN Committee Prepares GR  
4. EN Committee Chair GR  
5. EN College Dean GR  
6. GC Preparer  
7. GC Chair  
8. Faculty Senate Preparer  
9. Faculty Senate  
10. Provost II  
11. President  
12. Curricular Services  
13. Banner

## Approval Path

1. 08/08/17 1:53 pm  
John Hurtado (jehurtado): Approved for CLEN Department Head

2. 08/13/17 12:29 pm  
Sandra Williams (sandra-williams): Approved for Curricular Services Review

3. 09/15/17 4:22 pm  
Jennifer Veracruz (jveracruz): Approved for EN Committee Prepares GR

4. 09/15/17 4:24 pm  
Prasad Enjeti (enjeti): Approved for EN Committee Chair GR

5. 09/15/17 4:25 pm  
Prasad Enjeti (enjeti): Approved for EN College Dean GR

6. 09/25/17 8:28 am  
LaRhesa Johnson (lrjohnson): Approved for GC Preparer

7. 10/05/17 3:03 pm  
LaRhesa Johnson (lrjohnson): Approved for GC Chair
Course Syllabus

Syllabus: Use course syllabus form

Meeting times and locations

MWF 3:30

Learning outcomes

1. Describe the different riser concepts and configurations,
2. Explain the key decision drivers associated with riser concept selection,
3. Explain how to apply metocean and operational loads in a riser design,
4. Explain how manufacturing process, transportation, and installation methodology drive a riser design,
5. Prepare a riser design plan, including a load case matrix,
6. Identify when a riser concept is a qualified solution and if not, what testing may be required to qualify a riser solution for a particular field,
7. Explain the riser project evolution, including key interfaces, from concept selection to offshore acceptance testing.

Instructor information

Name       | Phone       | E-mail             | Office hours | Office location
-----------|-------------|--------------------|--------------|------------------
Julie Ingram       | 979-458-9811 | jingram@tamu.edu | MW 12-1:30   | EABB

Textbook and/or Resource Material

There is no textbook for this course. Class notes will be provided.

Grading scale

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = <60

Grading Policies

Activity | Weight | How is grade determined | Additional work for graduate students
---------|--------|-------------------------|-------------------------------

Attendance and Make-up Policies

University rules related to excused and unexcused absences are located online at Student Rule 7.

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Course Topics, Calendar of Activities, Major Assignment Dates

<table>
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<tr>
<th>Week</th>
<th>Topic</th>
<th>Required readings</th>
<th>Assignment due date</th>
<th>Major exam date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Riser Systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3</td>
<td>Rigid Pipe Risers</td>
<td>Fri Sep 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Flexible Pipe Risers</td>
<td>Fri Sep 21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Riser Concept Selection and Sizing (Project Assigned)</td>
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<tr>
<td>6</td>
<td>Riser Hang-off Location and Route Selection</td>
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<td>7</td>
<td>Riser Global Analysis</td>
<td></td>
<td></td>
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<td>8</td>
<td>Riser Extreme Event Analysis</td>
<td>Fri Oct 19</td>
<td></td>
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<td>9</td>
<td>Riser Fatigue Analysis</td>
<td>Fri Oct 26</td>
<td></td>
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<tr>
<td>10</td>
<td>Qualification Assessment and Testing</td>
<td>Fri Nov 2</td>
<td></td>
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<tr>
<td>11</td>
<td>Manufacturing, Testing and Packing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Riser Loadout, Transportation and Installation</td>
<td>Fri Nov 16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Riser Design Project</td>
<td>Fri Nov 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Review</td>
<td></td>
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Please select the appropriate ADA statement for your location

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Letters of support or other documentation

No

Additional information

Sandra Williams (sandra-williams) (08/13/17 12:29 pm): Updated course description and prerequisites to conform to catalog style guide for course descriptions.

Reported to state?
Course Change Request

New Course Proposal

Date Submitted: 08/08/17 4:34 pm

Viewing: ENGR 650: Flow Assurance and Operability of Subsea Systems

Last edit: 08/13/17 12:34 pm
Changes proposed by: jingram

Faculty Senate Number

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
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<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julie Ingram</td>
<td><a href="mailto:jingram@tamu.edu">jingram@tamu.edu</a></td>
<td>979-458-9811</td>
</tr>
</tbody>
</table>

Course prefix: ENGR  Course number: 650

Department: College of Engineering

College/School: College of Engineering

Academic Level: Graduate

Academic Level (alternate): Undergraduate

Effective term: 2018-2019

Complete Course Title: Flow Assurance and Operability of Subsea Systems

Abbreviated Course Title: FLOW ASSUR & OPERABILITY

Catalog course description:

Hydrocarbon production and transport from offshore fields to the host facilities, including prevention and remediation of phenomena that hinder fluid flow in production systems; subsea architecture, hydrodynamic and thermal considerations, reservoir fluid characterization and analysis, solids management, thermal hydraulics and production chemistry.

Prerequisites and Restrictions:

Graduate classification; enrollment in the College of Engineering; ENGR 630 or concurrent enrollment, or approval of instructor.

Concurrent Enrollment: No

Should catalog prerequisites / concurrent enrollment be enforced? Yes

Enforced Prerequisites / Concurrent Enrollment

<table>
<thead>
<tr>
<th>And/Or</th>
<th>(</th>
<th>Course Prefix/Number</th>
<th>Min Grade/Score</th>
<th>Academic Level</th>
<th>)</th>
<th>Concurrency?</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ENGR 630</td>
<td>C</td>
<td>GR</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

Crosslistings: No

Stacked: No

Semester: 3

Credit Hour(s): 3
Contact Hour(s) (per week): Lecture: 3  Lab: 0  Other: 0  Total: 3

Repeatable for credit? No
Course Syllabus

Syllabus: Use course syllabus form

Meeting times and locations
Tuesday and Thursday (TR) 7:05 pm – 8:20 pm CST
Room: ETB 1003

Learning outcomes

1. Describe the basics of flow assurance and operability and key design challenges for subsea field development, system operation and design considerations due to multiphase fluid flow.
2. Analyze reservoir fluids and properties, and apply modeling tools, methodologies and equations of state.
3. Define flow assurance design approach, key methods, and their integration into the different aspects of the subsea system and topsides equipment designs.
4. Utilize flow assurance analysis methods to manage solids formations and depositions due to hydrate, wax, asphaltene, scale, corrosion, sand, and emulsion.
5. Apply tools to model complex subsea systems, predictive methods, thermal hydraulics in steady state including pressure, temperature profiles, liquid holdup, erosion, flow regimes and line sizing/flow capacity and heat transfer/insulation for normal operations.
6. Identify transient behavior of multiphase fluid flow on production system design and operations including details on slugging, pigging, shutdown, restart, depressurization (blowdown), ramp-up/ramp-down, initial startup, packing and other transient operations.
7. Apply production chemistry to use inhibitors for prevention and remediation of solids formations/depositions during subsea system operations.
8. Integrate flow assurance evaluation and analysis results/recommendations, with pipeline, riser, subsea and topsides process engineering and operations, for fluid transport from reservoir to host facilities.

Instructor information

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>E-mail</th>
<th>Office hours</th>
<th>Office location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keshawa Shukla</td>
<td>979-862-9185</td>
<td><a href="mailto:kpshukla@tamu.edu">kpshukla@tamu.edu</a></td>
<td>TR 3:50pm</td>
<td>EABB</td>
</tr>
</tbody>
</table>

Textbook and/or Resource Material
There are no required textbooks for the course. However, you will be able to access readings associated with the course as follows:
- API 17 TR 14 – Ballot Edition

Grading scale

This will be a required course or an elective course for the following programs:

- Program(s)
  (MEN-ENGR) Master of Engineering in Engineering

I verify that I have reviewed the FAQ for Export Control Basics for Distance Education.

Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)

Will this course be taught as a distance education course?
Yes

Is 100% of this course going to be taught in Texas?
Yes

Will classroom space be needed for this course?
Yes
A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = <60

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<th>Activity</th>
<th>Weight</th>
<th>How is grade determined</th>
<th>Additional work for graduate students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance &amp; Participation</td>
<td>5%</td>
<td>Attendance and active participation in class</td>
<td></td>
</tr>
<tr>
<td>Homework</td>
<td>15%</td>
<td>Graded problem sets</td>
<td></td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
<td>Online quizzes</td>
<td></td>
</tr>
<tr>
<td>Midterm Examination</td>
<td>20%</td>
<td>Online exam</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>20%</td>
<td>Model file and results graded with rubric</td>
<td></td>
</tr>
<tr>
<td>Final Examination</td>
<td>25%</td>
<td>Online exam</td>
<td></td>
</tr>
</tbody>
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<th>Major exam date</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction and Course Overview</td>
<td>Sep 4</td>
<td></td>
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<tr>
<td>2</td>
<td>Introduction to Flow Assurance</td>
<td>Sep 18</td>
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<td>3</td>
<td>Reservoir Fluids</td>
<td>Sep 25</td>
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<td>4</td>
<td>Multiphase Flow</td>
<td>Oct 2</td>
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<tr>
<td>5</td>
<td>Hydrodynamic and Thermal Considerations</td>
<td>Oct 9</td>
<td></td>
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<td>6</td>
<td>Solids Management - Hydrates</td>
<td>Oct 16</td>
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<td>7</td>
<td>Solids Management - Wax / Paraffin</td>
<td>Oct 23</td>
<td>Oct 12</td>
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<td>8</td>
<td>Solids Management - Asphaltene, Scale, Corrosion &amp; Emulsion</td>
<td>Oct 30</td>
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<td>9</td>
<td>Steady State Thermal Hydraulics</td>
<td>Nov 6</td>
<td></td>
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<td>10</td>
<td>Transient Thermal Hydraulics</td>
<td>Nov 13</td>
<td></td>
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<tr>
<td>11-12</td>
<td>Project-Field Example and Software Application</td>
<td></td>
<td></td>
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<tr>
<td>13-14</td>
<td>Review</td>
<td>Nov 30</td>
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Please select the appropriate ADA statement for your location:

- Texas A&M University - Main Campus
- [Americans with Disabilities Act (ADA)]

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Review Comments

Sandra Williams (sandra-williams) 08/13/17 12:34 pm: Updated course description and prerequisites to conform to catalog style guide for course descriptions.

Reported to state?
Course Change Request

New Course Proposal

Date Submitted: 08/08/17 7:47 pm

Viewing: ENGR 651: Subsea Production Operations

Last edit: 08/13/17 12:37 pm

Changes proposed by: jingram

Faculty Senate Number

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
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<td><a href="mailto:jingram@tamu.edu">jingram@tamu.edu</a></td>
<td>979-458-9811</td>
</tr>
</tbody>
</table>

Course prefix ENGR Course number 651

Department College of Engineering

College/School College of Engineering

Academic Level Graduate

Academic Level (alternate) Undergraduate

Effective term 2018-2019

Complete Course Title Subsea Production Operations

Abbreviated Course Title SUBSEA PROD OPERATIONS

Catalog course description

Multiphase hydrocarbon production and transport from offshore fields to host facilities under both steady-state and transient conditions; includes reservoir and SURF system management through chemical gas and water injection, surface and subsea processing, testing and maintenance through all phases of a subsea development.

Prerequisites and Restrictions

Graduate classification; enrollment in the College of Engineering; ENGR 630 or concurrent enrollment, or approval of instructor.

Concurrent Enrollment

No

Should catalog prerequisites / concurrent enrollment be enforced?

Yes

Enforced Prerequisites / Concurrent Enrollment

<table>
<thead>
<tr>
<th>And/Or</th>
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<th>Min Grade/Score</th>
<th>Academic Level</th>
<th>Concurrency?</th>
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<tbody>
<tr>
<td></td>
<td>ENGR 630</td>
<td>C</td>
<td>GR</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Crosslistings

No Crosslisted With

Stacked

No Stacked with

Semester Credit Hour(s) 3 Contact Hour(s) (per week): Lecture: 3 Lab: 0 Other: 0 Total 3

Repeated for credit?

No

Three-peat?

No

In Workflow

1. CLEN Department Head
2. Curricular Services Review
3. EN Committee
   - Preparer GR
4. EN Committee Chair GR
5. EN College Dean GR
6. GC Preparer
7. GC Chair
8. Faculty Senate Preparer
9. Faculty Senate
10. Provost II
11. President
12. Curricular Services
13. Banner

Approval Path

1. 08/09/17 6:23 pm Tim Jacobs (tjjacobs): Approved for CLEN Department Head
2. 08/13/17 12:37 pm Sandra Williams (sandra­williams): Approved for Curricular Services Review
3. 09/15/17 4:23 pm Jennifer Veracruz (jveracruz): Approved for EN Committee Preparer GR
4. 09/15/17 4:24 pm Prasad Enjeti (enjeti): Approved for EN Committee Chair GR
5. 09/15/17 4:25 pm Prasad Enjeti (enjeti): Approved for EN College Dean GR
6. 09/25/17 8:28 am LaRhesa Johnson (lrjohnson): Approved for GC Preparer
7. 10/05/17 3:03 pm LaRhesa Johnson (lrjohnson): Approved for GC Chair

https://nextcatalog.tamu.edu/courseleaf/courseleaf.cgi?page=/courseadmin/18016/index.h...
**Course Syllabus**

**Syllabus:**
Use course syllabus form

**Meeting times and locations**
Tuesdays and Thursdays, 7:00-8:15 pm CST @ [RICH 1009]

**Learning outcomes**

<table>
<thead>
<tr>
<th>Learning Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain the key principles and parameters of production operations and key operating challenges for subsea field system operation due to multiphase flow.</td>
</tr>
<tr>
<td>2. Plan how to maximize the well’s productivity in safe and cost-effective manner through the analysis of different variables.</td>
</tr>
<tr>
<td>3. Identify transient operations of multiphase fluid flow on production system operations and remediation procedures.</td>
</tr>
<tr>
<td>4. Define the different subsea system approaches and determine which tools to utilize to manage different aspects of the subsea system and topsides equipment operations including: the management of solids due to hydrate, wax, asphaltene, scale, corrosion, sand, and emulsion.</td>
</tr>
<tr>
<td>5. Apply production chemistry to use inhibitors for remediation of solids formations/depositions during subsea system normal and transient operations.</td>
</tr>
<tr>
<td>6. Mitigate issues of production operations in pipeline, riser, subsea and topsides process systems for fluid transport from reservoir to host facilities.</td>
</tr>
<tr>
<td>7. Plan well intervention jobs using coiled tubing methods.</td>
</tr>
<tr>
<td>8. Manage corrosion, erosion, soluble and insoluble scales, and produced water handling challenges.</td>
</tr>
<tr>
<td>9. Employ the main types of artificial lift systems providing the necessary boost to improve the subsea fluid production.</td>
</tr>
<tr>
<td>10. Determine the causes of sand production and how to select sand control options to allow hydrocarbons to be produced without formation sand.</td>
</tr>
</tbody>
</table>

**Instructor information**

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>E-mail</th>
<th>Office hours</th>
<th>Office location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keshawa Shukla</td>
<td>979-862-9185</td>
<td><a href="mailto:kpshukla@tamu.edu">kpshukla@tamu.edu</a></td>
<td>TR 3-5</td>
<td>EABBB</td>
</tr>
</tbody>
</table>

**Textbook and/or Resource Material**
There are no required textbooks for the course. However, you will be able to access readings associated with the course as follows:
- API 17 TR 14 – Ballot Edition

**Grading scale**
- A = 90-100
- B = 80-89
- C = 70-79
D = 60-69
F = <60

Grading Policies

<table>
<thead>
<tr>
<th>Activity</th>
<th>Weight</th>
<th>How is grade determined</th>
<th>Additional work for graduate students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance &amp; Participation</td>
<td>5%</td>
<td>Attend class and actively participate</td>
<td></td>
</tr>
<tr>
<td>Homework</td>
<td>15%</td>
<td>Graded problem sets</td>
<td></td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
<td>Online quizzes</td>
<td></td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>20%</td>
<td>Online exam</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>20%</td>
<td>Project Report graded with rubric</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
<td>Online exam</td>
<td></td>
</tr>
</tbody>
</table>

Attendance and Make-up Policies
University rules related to excused and unexcused absences are located on-line at Student Rule 7.

All students are required to attend the weekly in-class session (distance education students via online thru Bb Collaborate and on campus students face to face) with the instructor. Be sure to actively participate by contributing to the discussion and asking any questions regarding the materials presented in the module/assignment. Distance education students are highly encouraged to check that your computer plug-ins and that your internet access are suited for this task prior to the first Bb Collaborate session using https://tamu.blackboard.com/webapps/bb-collaborate-BBLEARN/launchSession/guest?uid=56a401d3-7719-4304-b67a-e770931e03d&course_id=_70129_1

Course Topics, Calendar of Activities, Major Assignment Dates

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required readings</th>
<th>Assignment due date</th>
<th>Major exam date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course Introduction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Review of Production Operations</td>
<td></td>
<td>Jan 26</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Multiphase Flow &amp; Slugging</td>
<td></td>
<td>Feb 5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Piggling</td>
<td></td>
<td>Feb 9</td>
<td></td>
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<tr>
<td>5</td>
<td>Solids Management</td>
<td></td>
<td>Feb 19</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Transient Operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Multiphase Pumping &amp; Subsea Processing</td>
<td></td>
<td>Mar 2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Review &amp; Midterm</td>
<td></td>
<td></td>
<td>Mar 9</td>
</tr>
<tr>
<td>9</td>
<td>Artificial Lift and Gas Injection</td>
<td></td>
<td>Mar 23</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Water Injection &amp; Reinjection</td>
<td></td>
<td>Apr 2</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Surface Processing Facilities</td>
<td></td>
<td>Apr 6</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Well Completions &amp; Equipment</td>
<td></td>
<td>Apr 16</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Sand Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Field Project &amp; Software Applications</td>
<td></td>
<td>Apr 30</td>
<td></td>
</tr>
</tbody>
</table>

Please select the appropriate ADA statement for your location

Americans with Disabilities Act (ADA)
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu

Academic Integrity
"An Aggie does not lie, cheat, or steal, or tolerate those who do."
For additional information please visit: http://aggiehonor.tamu.edu

Letters of support or other documentation
No

Additional information
Reviewer Comments
Sandra Williams (sandra-williams) (08/13/17 12:37 pm): Updated course description and prerequisites to conform to catalog style guide for course descriptions.

Reported to state?
# Course Change Request

## New Course Proposal

**Date Submitted:** 07/27/17 4:46 pm  
**Last edit:** 07/28/17 7:56 am  
**Changes proposed by:** dbeck

### Viewing: MEEN 687: Additive and Subtractive Processes in Custom Manufacturing

**Faculty Senate Number**

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kassandra Sims</td>
<td><a href="mailto:ksims19@tamu.edu">ksims19@tamu.edu</a></td>
<td>979-458-9814</td>
</tr>
</tbody>
</table>

**Course prefix:** MEEN  
**Course number:** 687  
**Department:** Mechanical Engineering  
**College/School:** College of Engineering  
**Academic Level:** Graduate  
**Effective term:** 2018-2019

**Complete Course Title:** Additive and Subtractive Processes in Custom Manufacturing  
**Abbreviated Course Title:** ADTV SUBTR PROCESS CUST MFG

**Catalog course description:**  
Machining theory; traditional and non-traditional machining processes; CNC machines and tools; geometric dimensioning and tolerance (GD&T); additive manufacturing systems and processes; materials in additive manufacturing.

**Prerequisites and Restrictions:**  
MEEN 361 & MEEN 360 or equivalent  
Concurrent Enrollment: No

**Should catalog prerequisites / concurrent enrollment be enforced?** No

**Crosslistings:** No  
**Crosslisted With:** Stacked Yes

**Stacked:** MEEN 453 Additive and Subtractive Processes in Custom Manufacturing - Course MEEN 453 Additive and Subtractive Processes in Custom Manufacturing not Found

**Semester Credit Hour(s):** 3  
**Contact Hour(s):** 3 (per week)  
**Lecture:** 3  
**Lab:** 0  
**Other:** 0

**Repeatable for credit?** No  
**Three-peat?** No

**CIP/Fund Code:** 1419010006  
**Default Grade Mode:** Letter Grade (G)  
**Alternate Grade Modes:** Satisfactory/Unsatisfactory

**Method of instruction:** Lecture

**Will sections of this course be taught as non-traditional? (i.e.,**

---

**In Workflow**

1. MEEN Department Head  
2. Curricular Services Review  
3. EN Committee Preparer GR  
4. EN Committee Chair GR  
5. EN College Dean GR  
6. GC Preparer  
7. GC Chair  
8. Faculty Senate Preparer  
9. Faculty Senate  
10. Provost II  
11. President  
12. Curricular Services  
13. Banner

**Approval Path**

1. 07/27/17 10:58 pm  
   Andreas Polycarpou (apolycarpou): Approved for MEEN Department Head  
2. 07/28/17 7:58 am  
   Sandra Williams (sandra-williams): Approved for Curricular Services Review  
3. 09/04/17 11:01 am  
   Jennifer Veracruz (jveracruz): Approved for EN Committee Preparer GR  
4. 09/15/17 4:24 pm  
   Prasad Enjeti (enjeti): Approved for EN Committee Chair GR  
5. 09/15/17 4:26 pm  
   Prasad Enjeti (enjeti): Approved for EN College Dean GR  
6. 09/25/17 8:28 am  
   LaRhesa Johnson (lrjohnson): Approved for GC Preparer  
7. 10/05/17 3:04 pm  
   LaRhesa Johnson (lrjohnson): Approved for GC Chair

---

Will this course be taught as a distance education course?
No

Is 100% of this course going to be taught in Texas?
Yes

Will classroom space be needed for this course?
Yes

This will be a required course or an elective course for the following programs:

<table>
<thead>
<tr>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(MS-MEEN) Master of Science in Mechanical Engineering</td>
</tr>
<tr>
<td>(MEN-MEEN) Master of Engineering in Mechanical Engineering</td>
</tr>
<tr>
<td>(PHD-MEEN) Doctor of Philosophy in Mechanical Engineering</td>
</tr>
</tbody>
</table>

Course Syllabus

Syllabus: Upload syllabus
Upload syllabus
Syllabus 453-687_518_Tai-v2 (new course proposal).pdf

Letters of support or other documentation
No

Additional information
Course will be stacked with MEEN 453, which is being concurrently proposed as a new course.

Reviewer Comments
Sandra Williams (sandra-williams) (03/27/17 10:31 am): Edits made to form.
Sandra Williams (sandra-williams) (03/27/17 10:37 am): Rollback: Syllabus shows 489/689 (title and throughout) for course numbers; title not the same as course form; prereqs do not match form; grading scale missing (A= B= C= D= F=); "winter break" - do you mean "spring break"; homework - "no late submission is accepted" - what about University excused absences; absence policy - "valid proof prior to class" is not always feasible; 17 weeks for schedule of topics???
Sandra Williams (sandra-williams) (07/27/17 3:50 pm): Rollback: Add stacked course information to form. Syllabus prerequisites still do not match form; syllabus still shows 489/689 throughout.
Sandra Williams (sandra-williams) (07/28/17 7:57 am): Update received.

Reported to state?
INSTRUCTOR:
Professor Bruce L. TAI
Email: btai@tamu.edu
Office hours: TBD at MEOB 413
Phone: 979-458-9888

TEACHING ASSISTANT:
Email: TBD
Office hours: TBD

CATALOG DESCRIPTION: (3-0) Credit 3. Traditional and non-traditional machining processes; machining principles; CNC machines and tools; Additive manufacturing systems and processes; Material science in additive manufacturing; Fundamentals of geometric dimensioning and tolerance (GD&T);

PREREQUISITES: MEEN 361 & MEEN 360 or equivalent

TEXTBOOKS:

COURSE LEARNING OUTCOMES: At the end of this course, students should be able to:
1. select proper manufacturing methods for custom design
2. evaluate the pros and cons between subtractive and additive manufacturing processes
3. apply basic GD&T
4. describe the capabilities of traditional and non-traditional machining processes
5. analyze the surface finish based on the process and material
6. describe the mechanisms of different additive manufacturing processes
7. design manufacturing processes for the custom product via a team project

TOPICS COVERED:
Week 1: Introduction, Project description
Week 2: Single-point machining (turning)
Week 3: Multi-point machining (drilling, milling, grinding)
Week 4: CNC machine and CAD/CAM
Week 5: Non-traditional machining processes (EDM, ECM, Laser)
Week 6: Geometric Dimensioning & Tolerancing (GD&T)
Week 7: Metrology and Inspection
Week 8: Project review I
(Spring Break)
Week 9: Extrusion-based AM
Week 10: Photopolymer-based AM
Week 11: Power-bed fusion processes
Week 12: Material jetting AM
Week 13: Other AM technologies and Project review II
Week 14: Feasibility study week

Week 15: Final presentation

GRADING POLICIES:
Homework 15% (10 assignments)
Exam #1 25%
Exam #2 25%
Team Project 30%: Design reviews (10%) & Final report and product (20%)
Participation 5% (attendance)

Total Points: 100
Grading Scale: 90-100=A, 80-89=B, 70-79 = C, 60-69 = D, < 60 = F.

COURSE DESCRIPTION:
This will be a “stacked” course (MEEN453/687) with common lectures and extensive overlap in assignments. This course includes three major components: machining (subtractive processes), 3D printing (additive processes), and a team project for manufacturing design. In the first part, basic theories of various machining processes will be covered, with an emphasis on machining parameter and tool selection. The second part will introduce common additive processes along with the material science behind these technologies. The course will also provide practical knowledge in GD&T and hands-on experiences in CNC machines and 3D printers.

The level, complexity, and scope will be more challenging for many assignments and exams for those taking the graduate-level course, MEEN 687.

TEAM PROJECT:
One term project will be carried out throughout the semester with each team consisting of 4 people. A Stirling Engine design will be assigned to each team. Students will design proper manufacturing processes using available machines in MEEN department and produce a functional prototype. The selection of manufacturing processes needs to consider costs, time, and the quality of the product.

HOMEWORK:
Homework is assigned along with each topic covered in this course. Homework problems will be announced and posted on eCampus. The solution of the problem should be presented in an organized, neat, and logical manner. Homework must be submitted as a hardcopy at the beginning of the class on the due date. No late submission is accepted. Individual cases due to university excuses or illness should inform the instructor to reschedule a deadline.

RELATIONSHIP OF COURSE TO PROGRAM OUTCOMES:

<table>
<thead>
<tr>
<th>ABET Program Outcome</th>
<th>ABET Program Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>f. understanding of professional and ethical responsibility</td>
</tr>
<tr>
<td>a. ability to apply knowledge of mathematics, science and engineering</td>
<td></td>
</tr>
<tr>
<td>b. ability to design and construct experiments, as well as to analyze and interpret data</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>g. ability to communicate effectively</td>
</tr>
<tr>
<td>c. ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability</td>
<td></td>
</tr>
<tr>
<td>d. ability to function on multi-disciplinary</td>
<td></td>
</tr>
<tr>
<td>i. recognition of the need for, and an ability to</td>
<td></td>
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</tbody>
</table>
teams engage in life-long learning

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>e. ability to identify, formulate and solve engineering problems</td>
<td>j. a knowledge of contemporary issues</td>
</tr>
<tr>
<td>X</td>
<td></td>
</tr>
<tr>
<td>k. ability to use the techniques, skills and modern engineering tools necessary for engineering practice</td>
<td>X</td>
</tr>
</tbody>
</table>

**ABSENCE POLICY**

You are expected to be prepared for, attend, and participate in each lecture. Class attendance records will be kept by using sign-in sheets. Excused absences do not deduct points from your participation grade. However, a valid proof should be turned in **prior to or immediately after the next class**. See rules for official excused absence. (http://student-rules.tamu.edu/rule07).

You may use the Texas A&M University Explanatory Statement for Absence from Class form available at http://attendance.tamu.edu with one exception: if you miss an exam because you are ill you must provide a medical confirmation note before you can make up the exam. The note must contain the date and time of the illness and the medical professional’s confirmation of needed absence.

**AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information visit http://disability.tamu.edu.

**ACADEMIC INTEGRITY STATEMENT AND POLICY**

Aggies have a Code of Honor, which is stated as: “**Aggies do not lie, cheat, or steal, nor do they tolerate those who do.**” The Aggie Code of Honor is an effort to unify the aims of all Texas A&M men and women toward a high code of ethics and personal dignity. For most, living under this code will be no problem, as it asks nothing of a person that is beyond reason. It only calls for honesty and integrity, characteristics that Aggies have always exemplified. The Aggie Code of Honor functions as a symbol to all Aggies, promoting understanding and loyalty to truth and confidence in each other. Effective September 1, 2004, the Office of the Aggie Honor System is operational; see http://aggiehonor.tamu.edu. There is a zero tolerance for academic dishonesty. Violations will be addressed by the Aggie Honor System Office and in compliance with Texas A&M Student Rules, http://student-rules.tamu.edu/rule20.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture #</th>
<th>Content</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/18</td>
<td>T1</td>
<td>Syllabus and Introduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1/20</td>
<td></td>
<td>Team project</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1/23</td>
<td>T2</td>
<td>Single-point cutting (Ch. 2)</td>
<td></td>
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<tr>
<td></td>
<td>1/25</td>
<td>T3</td>
<td>Single-point cutting</td>
<td></td>
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<tr>
<td></td>
<td>1/27</td>
<td>T4</td>
<td>Multi-point cutting (Ch. 3)</td>
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<tr>
<td>3</td>
<td>1/30</td>
<td>T5</td>
<td>Multi-point cutting</td>
<td>HW 2</td>
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<td></td>
<td>2/1</td>
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<td>T5 continued</td>
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<tr>
<td></td>
<td>2/3</td>
<td>T6</td>
<td>Abrasive cutting (Ch. 4)</td>
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<tr>
<td>4</td>
<td>2/6</td>
<td>T7</td>
<td>Cutting tools and CNC machine (Ch. 5)</td>
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<tr>
<td></td>
<td>2/8</td>
<td>T8</td>
<td>G-codes</td>
<td>HW 3 (team)</td>
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<tr>
<td></td>
<td>2/10</td>
<td>T9</td>
<td>CAD/CAM (Autodesk Fusion 360)</td>
<td></td>
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<tr>
<td>5</td>
<td>2/13</td>
<td>T10</td>
<td>Advanced process - EDM (Ch. 11)</td>
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<td></td>
<td>2/15</td>
<td>T11</td>
<td>Advanced process - ECM (Ch. 12)</td>
<td>HW 4</td>
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<td>2/17</td>
<td>T12</td>
<td>Advanced process - Laser (Ch. 13)</td>
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<td>6</td>
<td>2/20</td>
<td>T13</td>
<td>GD&amp;T fundamentals – I</td>
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<td>2/22</td>
<td>T14</td>
<td>GD&amp;T fundamentals – II</td>
<td>HW 5</td>
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<td>T15</td>
<td>GD&amp;T fundamentals - III</td>
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<td>7</td>
<td>2/27</td>
<td>T16</td>
<td>Inspection technologies</td>
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<td></td>
<td>3/1</td>
<td>T17</td>
<td>Review for Exam I</td>
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<td>3/3</td>
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<td></td>
<td>Exam I In class</td>
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<tr>
<td>8</td>
<td>3/6</td>
<td></td>
<td>Design review</td>
<td>5 mins/team</td>
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<tr>
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<td>3/8</td>
<td></td>
<td>Design review</td>
<td>5 mins/team</td>
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<td>3/10</td>
<td>T18</td>
<td>Return exam, Overview of AM (Ch. 3)</td>
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<td>Spring break</td>
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<td>3/20</td>
<td>T19</td>
<td>Overview of AM (Ch. 3)</td>
<td></td>
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<tr>
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<td>3/22</td>
<td>T20</td>
<td>Extrusion-based AM (Ch. 6)</td>
<td>HW 6</td>
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<td>3/24</td>
<td>T21</td>
<td>Extrusion-based AM</td>
<td>HW 7 (team)</td>
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<td>10</td>
<td>3/27</td>
<td>T22</td>
<td>Photopolymer-base AM (Ch.4)</td>
<td></td>
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<tr>
<td></td>
<td>3/29</td>
<td>T23</td>
<td>Photo-polymerization</td>
<td></td>
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<tr>
<td></td>
<td>3/31</td>
<td>T24</td>
<td>Photo-polymerization</td>
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<td>11</td>
<td>4/3</td>
<td>T25</td>
<td>Powder bed fusion process (Ch. 5/8)</td>
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<td></td>
<td>4/5</td>
<td>T26</td>
<td>Powder bed fusion process</td>
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<td>T27</td>
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<td>12</td>
<td>4/10</td>
<td>T28</td>
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<td>4/12</td>
<td>T29</td>
<td>Material jetting AM</td>
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<td>4/14</td>
<td>T30</td>
<td>Other AM technologies</td>
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<td>13</td>
<td>4/17</td>
<td></td>
<td>Design review II</td>
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<tr>
<td></td>
<td>4/19</td>
<td></td>
<td>Design review II</td>
<td>5 mins/team</td>
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<tr>
<td></td>
<td>4/21</td>
<td>T32</td>
<td>Review for Exam II</td>
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<td>14</td>
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<td>Exam II In class</td>
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<tr>
<td></td>
<td>4/26</td>
<td></td>
<td>Feasibility study and prototyping</td>
<td>Project week</td>
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<tr>
<td></td>
<td>4/28</td>
<td></td>
<td>Feasibility study and prototyping</td>
<td>Project week</td>
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<td>15</td>
<td>5/1</td>
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<td>Final presentation</td>
<td>5 mins/team</td>
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<td></td>
<td>5/2</td>
<td></td>
<td>Final presentation</td>
<td>5 mins/team</td>
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<td></td>
<td>5/3</td>
<td></td>
<td>Reading day – no class</td>
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<tr>
<td>5/8</td>
<td></td>
<td></td>
<td>Final Exam – submit Final Report</td>
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</table>
Course Change Request

New Course Proposal

Date Submitted: 04/28/17 1:49 pm
Viewing: PSYC 651: Cultural Psychology
Also Known As: AFST 651
Last edit: 06/21/17 3:58 pm
Changes proposed by: lgeraci

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisa Geraci</td>
<td><a href="mailto:lgeraci@tamu.edu">lgeraci@tamu.edu</a></td>
<td>9798452585</td>
</tr>
</tbody>
</table>

Course prefix: PSYC  
Course number: 651

Department: Psychology
College/School: Liberal Arts
Academic Level: Graduate
Effective term: 2018-2019

Complete Course Title: Cultural Psychology
Abbreviated Course Title: CULTURAL PSYCHOLOGY

Catalog course description:
Surveys key readings in the field of cultural psychology; discussion and examination of relationship between psychological processes (e.g., motivation, memory, self perception, prejudice) and sociocultural contexts.

Prerequisites and Restrictions:
Enrollment in a graduate program or approval of instructor.
Concurrent Enrollment: No
Should catalog prerequisites/concurrent enrollment be enforced?: No
Crosslistings: Yes  
Crosslisted With: AFST 651
Stacked: No  
Stacked with: No

Semester: 3  
Credit Hour(s): 3
Contact Hour(s) (per week): Lecture: 3  
Lab: 0  
Other: 0
Repeatable for credit?: No
Three-peat?: No
CIP/Fund Code: 4227070001
Default Grade Mode: Letter Grade(G)
Alternate Grade Modes: Satisfactory/Unsatisfactory
Method of instruction: Lecture
Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education): No

In Workflow
1. PSYC Reviewer GR
2. PSYC Department Head
3. CLLA Department Head
4. Curricular Services Review
5. LA Committee Preparer GR
6. LA Committee Chair GR
7. LA College Dean GR
8. GC Preparer
9. GC Chair
10. Faculty Senate Preparer
11. Faculty Senate
12. Provost II
13. President
14. Curricular Services
15. Banner

Approval Path
1. 04/28/17 5:06 pm Charles Samuelson (c-samuelson): Approved for PSYC Reviewer GR
2. 04/28/17 8:53 pm Heather Lench (hlench): Approved for PSYC Department Head
3. 06/21/17 8:21 am Steve Oberhelman (s-oberhelman): Approved for CLLA Department Head
4. 06/21/17 4:02 pm Sandra Williams (sandra-williams): Approved for Curricular Services Review
5. 06/28/17 7:33 am Tiffany Green (tgreen): Approved for LA Committee Preparer GR
6. 09/11/17 3:27 pm Leroy Dorsey (l-dorsey): Approved for LA Committee Chair GR
7. 09/11/17 3:28 pm Leroy Dorsey (l-dorsey): Approved for LA College Dean GR
8. 09/25/17 8:29 am LaRhesa Johnson (ljohnson): Approved for GC Preparer
9. 10/05/17 3:05 pm LaRhesa Johnson (ljohnson): Approved for GC Chair
Will this course be taught as a distance education course? No
Is 100% of this course going to be taught in Texas? Yes
Will classroom space be needed for this course? Yes

This will be a required course or an elective course for the following programs:

Required (select program)

Elective (select program)

<table>
<thead>
<tr>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(PHD-PSYC) Doctor of Philosophy in Psychology</td>
</tr>
</tbody>
</table>

**Course Syllabus**

Syllabus: Upload syllabus

Upload syllabus [Salter_CultPsych1_Overview_Fa17.docx](https://nextcatalog.tamu.edu/courseleaf/courseleaf.cgi?page=/courseadmin/17946/index.html...)

Letters of support or other documentation: No

Additional information

Reviewer Comments

Reported to state?
CULTURAL PSYCHOLOGY
PSYC 651/AFST 651

Instructor: Phia S. Salter, PhD
Class Meetings: Mon 2:00-5:00pm; Psychology Bldg 422
Office: Psychology Bldg 212
Office Hours: TBA
Email: psalter@tamu.edu
Phone: 979-845-3794

Prerequisites: Enrolled in graduate program or permission of instructor

COURSE DESCRIPTION
What is culture and how does it relate to psychology? What, if anything, can psychological science contribute to the study of culture? Rather than a set of values, norms, or lenses that condition basic experience and can be peeled away to reveal "pure" psyche, this course considers culture as a "basic" process in its own right. Specifically, we will consider psychological experience and culture as they exist in a dynamic relationship of mutual constitution (MC): the idea that “culture and psyche...make each other up.” Associated with this course are four themes:

Course Themes

(1) The Cultural Grounding of Psychological Experience: One side of the MC relationship refers to the idea that human experience is not the simple expression of inborn genetic programming, but instead requires incorporation (literally, taking into the body) of cultural context. From this perspective, "standard" patterns of psychological phenomena documented in the typical research project not "just natural" but instead reflect particular, sociocultural foundations. A major theme of the course is to make the sociocultural foundations of experience visible, not just for "exotic" behavior of people in "other" settings, but also for the familiar phenomena routinely reported in mainstream Psychology journals, where they tend to remain invisible.

(2) The Psychological Foundations of Culture: Culture does not exist apart from human activity, but is continually re-created as people make sense of changing circumstances. The other side of the MC relationship emphasizes that the world is not a natural object separate from human action, but instead is a psychological product. In the course of everyday action, people reproduce structures of mind-in-context into which they deposit their beliefs and desires. Accordingly, humans are born into "intentional" worlds that are not neutral, but instead carry a psychological charge associated with the accumulated sediment of previous human action (which then directs their psychological experience in culturally evolved ways). A major theme of the course is to make visible cultural-psychological foundations of (and traces in) everyday worlds..

(3) The Cultural Grounding of Psychological Science: The third theme of the course concerns the extent to which the discipline of Psychology, itself, is a cultural product. Scientists often imagine themselves to be detached, position-less observers of universal, objective reality. In contrast, this theme considers how theory and practice in Psychology and other social sciences reflects particular—and potentially variable—constructions of reality.

(4) Focus on Africana settings: A very unique feature of this course is a focus on African settings. I have tried to include material from African settings or the diaspora in every week of the course. Besides directing attention to neglected cases, this focus provides an interesting perspective on the typical (East Asian versus North American) comparisons that have dominated scientific imagination in psychology. As such, this course counts toward an Africana Studies Graduate Certificate.
COURSE REQUIREMENTS AND GRADES

GRADING SCALE AND ASSESSMENT:
A = 90 and above; B = 80-89 points; C = 70-79 points; D = 60-69 points; F = below 60 points.

Term paper 50 points
Written Reviews 40 points
Participation 10 points

Term Paper: In lieu of a final exam, the major graded assignment for the course (constituting 50% of the course grade) is a term paper. This assignment provides another way for you to engage the themes of the course in the context of a topic that you find interesting. You can illuminate the cultural grounding of a phenomenon by reviewing "cross-cultural" or other evidence; you can do a "cultural" critique of the way mainstream Psychological Science has treated the phenomenon; you can propose a cultural-psychological research project; or you can do all of these in the same paper. Ideally, you should write a paper that you will use later, either as a stand-alone submission or to provide sections that you appropriate for other papers.

The length of this paper should be 12-18 double-spaced pages. It is due to me (preferably as an email attachment) by 5:00pm on December 15. You will get more details on structure and format of the paper later in the course. For now I want to emphasize that this exercise is a term paper—that is, something you do throughout the semester. You should plan to come see me early in course so that we can talk about a topic and start tracking down relevant material. Ideally, you can choose as your "participant selection" (see above) a paper that figures prominently in your own term paper. This way, your final paper will benefit from the thoughts of fellow course participants.

Reviews/Participation/Discussion: The format of the course is a seminar. I will typically have a brief presentation or lecture to ground discussion at the beginning of the session. However, we will use most of the class session for discussion of weekly reading assignments. Given this format, the success of the course depends on input from course participants. This input comes in 3 forms that will constitute the basis for Participation/Discussion grades.

1. Discussion of Reading Assignments. In most cases, I have scheduled 4 or 5 reading selections for each week. My expectation is that seminar participants will read all selections and come prepared to discuss.

2. Reviews. Although it is the responsibility of all participants to read each paper and prepare for discussion, one course participant will bear primary responsibility for critique and analysis of assigned readings. Designated reviewers of each paper will prepare a one-page (single spaced) commentary that they submit electronically to the ecampus website by 6:00 PM Sunday evening before the selection appears on the syllabus. The other participants are not "free"; instead, their assignment is to access these reviews and read them before coming to class. The rationale for reviews procedure is not only to give participants practice at reviewing papers, but also to stimulate class discussion. Toward this end, reviewers for each paper will bear primary responsibility for starting the discussion of each paper. As we consider each assigned paper, we will turn to the reviewer responsible for that paper to begin the discussion with an appropriate question or comment.

3. Participant Selections. The final mechanism for participant input concerns the reading assignments themselves. I have reserved two weeks of the course syllabus for "participant selections". Each course participant will choose a paper for addition to the course syllabus. Participants can choose something from the "further reading" sections of the reading list, or
they can nominate something that arises from their own search of relevant literature. In either case, this feature provides an opportunity for participants to steer the course in the direction of their individual interests. To the extent that there is an evaluative component to these selections, it will be on the quality of the selection and the presenter’s discussion of it.

**READING LIST**

Each week of the reading list has two sections. The first section lists **required selections.** The second section ("Further Reading") lists optional selections that course participants can read if interested. Most journal articles are available electronically from Texas A&M libraries through their collection of e-journals. Books chapters and the few journal articles that are not electronically available will be available through the Blackboard website. I reserve the option to change selections in consultation with seminar participants to respond to emerging influences and interests.

**Week 1: Introductions and overview**

**Week 2: Cultural Psychology: What is it?**

**Further Reading:**

**Week 3: Culture: What is it?**

**Further Reading:**


**Week 4: Methodological Issues**


**Further Reading:**


**Week 5: Self and Identity**


Further Reading:

Week 6: Motivation and Emotion

Further Reading:


**Week 7: Perception, Cognition, Language**


**Further Reading:**


**Week 8: Individual Reading Selections**

**Week 10: Individual Reading Selections**

**Week 10: Relationship and Social Support**


**Further Reading:**


**Week 11: Health and Body**

http://pdfserve.informaworld.com/675374_915031305_928490628.pdf

**Further Reading:**


**Week 12: Development in Cultural Context**


**Further Reading:**

Week 13: Memory and Narrative


Further Reading:


Week 14: Critical Perspectives on Oppression and Liberation


Further Reading:


**Week 15: Finals Week (There is no final exam in this course)**

**Academic Integrity Statement:** "An Aggie does not lie, cheat, or steal or tolerate those who do." The complete university Honor Council Rules and Procedures regarding academic integrity may be found on the web at [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu).

Please refer to the Honor Council rules and Procedures on the web [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu). Academic misconduct by a student shall include, but not be limited to, disruptions of classes; giving or receiving unauthorized aid on examinations or in the preparation of reports or other assignments; knowingly misrepresenting the source of any academic work; falsification of research results; plagiarizing of another's work; or otherwise acting dishonestly in research. Please do not put yourself or me in the position of dealing with such misconduct.

**Attendance and Late Policy:** Attendance is required in this course. If an absence is excused, the instructor will either provide the student an opportunity to make up any work that contributes to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor. Except in the case of university-approved absences, students will lose 10% a day in starting value for late assignments. Please see [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07).

**Students with disabilities:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information visit [http://disability.tamu.edu/](http://disability.tamu.edu/).

**Civility:** We should work together to create a classroom atmosphere conducive to learning. While we may sometimes disagree with each other on topics discussed in class, it’s important that we remember that appreciating a diversity in perspectives is an important part of the learning process. With that said, all opinions are welcome. However, disagreements should be directed at an argument and not the person. It is expected that everyone will be treated with respect. **If you ever feel that you are not being treated with respect in the classroom, please let me know.**

**Cell phones and other noisy things:** It is rude to use cell phones or other personal communication devices during instructional time. It is expected that all cell phones be silenced and put away during class time. Cell phones, pagers, iPods, headphones, etc are not to be in use while in class or during exam days. Please refrain from texting, instant messaging, gaming, and emailing while in class. It is distracting to the instructor as well as to those around you. If you require an exception to this rule, come and talk to me about your situation asap. If any of these issues becomes a problem, you will be excused from the class.
**Writing assistance:** The University Writing Center (UWC), located in 214 Evans Library and 205 West Campus Library, offers one-on-one consultations to writers. UWC consultations are highly recommended but are not required. Help is available with brainstorming, researching, drafting, documenting, revising, and more; no concern is too large or too small. UWC consultants will also help you improve your proofreading and editing skills. If you visit the UWC, take a copy of your writing assignment, a hard copy of your draft or any notes you may have, as well as any material you need help with. To find out more about UWC services or to schedule an appointment, call 458-1455, visit the web page at writingcenter.tamu.edu, or stop by in person.

*The instructor reserves the right to modify the syllabus at any time. Changes may occur at the instructors discretion based upon the speed at which we progress through the material and the possibility of new, timely topics that may arise throughout the term.*
Course Change Request

New Course Proposal

Date Submitted: 08/16/17 5:25 pm

Viewing: SOPH 601: Thinking in Populations: The Public Health Mindset

Last edit: 09/21/17 12:53 pm
Changes proposed by: danko

Contact(s)

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<tr>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Rick Danko</td>
<td><a href="mailto:danko@sph.tamhsc.edu">danko@sph.tamhsc.edu</a></td>
<td>5123414927</td>
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Course prefix: SOPH  Course number: 601

Department: School of Public Health
College/School: Public Health
Academic Level: Graduate
Effective term: 2018-2019

Complete Course Title: Thinking in Populations: The Public Health Mindset
Abbreviated Course Title: THINK POPL PUBL HLTH MINDSET

Catalog course description:
Intensive case-focused immersion in the distinctive features of public health practice; mindset and foundations for defining population health status, addressing complex population health issues and leading protection and improvement of health at the population level; the first of four courses that comprise the MPH core required for all MPH students.

Prerequisites and Restrictions:
SOPH 602 and SOPH 603, or concurrent enrollment.

Concurrent Enrollment: No
Should catalog prerequisites / concurrent enrollment be enforced?: Yes

Enforced Prerequisites / Concurrent Enrollment

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<td>SOPH 602</td>
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<td>GR</td>
<td>Yes</td>
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<tr>
<td>And</td>
<td>SOPH 603</td>
<td>C</td>
<td>GR</td>
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</table>

Crosslistings: No
Stacked: No
Semester  | 2  
Credit Hour(s)  | 2  
Contact Hour(s) (per week):  
Lecture: 2  
Lab: 0  
Other: 0  
Total 2  
Repeatable for credit?  
No  
CIP/Fund Code  
5122010014  
Default Grade Mode  
Letter Grade(G)  
Method of instruction  
Lecture  
Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)  
Yes  
Learning Outcomes  
Meets traditional face-to-face learning outcomes.  
Describe how learning outcomes are met or provide justification why they are not met.  
See attached.  
Hours  
Meets traditional face-to-face hours.  
Describe how hours are met or provide justification why they are not met.  
See attached.  
Will this course be taught as a distance education course?  
Yes  
I verify that I have reviewed the FAQ for Export Control Basics for Distance Education.  
Yes  
Is 100% of this course going to be taught in Texas?  
Yes  
Will classroom space be needed for this course?  
Yes  
Required (select program)  
\begin{tabular}{|l|}
\hline  
(MPH-DCH) Master of Public Health in Occupational Safety and Health  
(MPH-PHEO) Master of Public Health in Environmental Health  
(MPH-HPCH) Master of Public Health in Health Promotion and Community Health Sciences  
(MPH-PHEB) Master of Public Health in Biostatistics  
(MPH-PHEP) Master of Public Health in Epidemiology  
(MPH-PHPM) Master of Public Health in Health Policy Management  
\hline  
\end{tabular}  
Elective (select program)  
Course Syllabus  
\begin{itemize}  
\item Syllabus: Upload syllabus  
\item Upload syllabus: SOPH_601_Syllabus_POSTED_2.docx  
\item Letters of support or other documentation: Yes  
\item Upload files: verification memo for shortened and DE courses SOPH 601,602,603,604.pdf  
\item Additional information: Additional attachment provides statement of verification of student learning outcomes (competencies) and semester credit hours for this shortened course and its distance education delivery.  
\end{itemize}
Memorandum August 16, 2016

TO: Graduate Committee

FROM: Jay E. Maddock, PhD.

Dean, School of Public Health

RE: Approval of NEW distance and shortened courses for MPH Core:
SOPH 601, SOPH 602, SOPH 603 and SOPH 604

The proposed new Public Health Core for the School of Public Health’s Master of Public Health (MPH) degrees consists of four shortened, mostly face-to-face courses:

- SOPH 601 is a two-week, 2 SCH course taught in August, face-to-face with some web-based instructional modules (Fall semester)
- SOPH 602 is a six-week, 3 SCH course taught in the first half of the Fall semester
- SOPH 603 is a six-week, 3 SCH course taught in the second half of the Fall semester
- SOPH 604 is a one-week, 1 SCH course taught in January, face-to-face with some web-based instructional modules (Spring semester)

There will also be fully web-based DE versions of these courses.

There is no traditional 15 week face-to-face version of the course.

Both the shortened and web-based versions have the same learning outcomes, corresponding to Foundation Knowledge and Competencies required by CEPH (Council on Education in Public Health, the accrediting body for schools of public health).

How did the department determine that the courses taught in shortened format meet the same credit hour requirement as face-to-face courses taught in a long semester?

- We identified actual times of formalized instruction in each of the four courses by adding up time for sessions in each:
  - SOPH 601: 1455 minutes face to face, 132 minutes web-based modules -- equivalent to 32 hours of formalized instruction
  - SOPH 602: 2400 minutes of formalized instruction, all face-to-face (four 75 minute classroom sessions and one 100 minute studio session per week for six weeks)—equivalent to 48 hours of formalized instruction.
  - SOPH 603: 2400 minutes of formalized instruction, all face-to-face (four 75 minute classroom sessions and one 100 minute studio session per week for six weeks)—equivalent to 48 hours of formalized instruction.
  - SOPH 604: 525 minutes face to face, 250 minutes web-based modules -- equivalent to 16 hours of formalized instruction.

- We determined homework/preparation time (such reading required materials, viewing videos, exploring websites, gathering information, studying for exams, journaling, writing and reviewing...
papers, preparing portfolio projects) with estimates guided by the Accrediting Commission of the Distance Education and Training Council’s *H.13 Determining Credit Hours* guidance (attached) to ensure a minimum of 2 hours of homework per hour of formalized instruction.

**How did the department determine that the courses taught by distance format meet the same credit hour requirement as face-to-face courses taught in a long semester?**

Because the shortened courses were determined to meet requirements of courses taught in a long semester, the department adapted the shortened for DE delivery.

- We identified actual times of formalized instruction in each of the four courses by adding up time for sessions in each:
  - SOPH 601: the original web-based modules (132 minutes) were retained for DE course delivery; the 1455 minutes of face to face sessions were converted to equivalent instructor facilitated web-based sessions (such as interactive web-based modules, chat and discussion sessions, student presentation and critique sessions, quizzes) for a total equivalent to 32 hours of formalized instruction
  - SOPH 602: the course material in the 2400 minutes of face-to-face formalized instruction was converted to equivalent instructor facilitated web-based modules, for a total equivalent to 48 hours of formalized instruction
  - SOPH 603: the course material in the 2400 minutes of face-to-face formalized instruction was converted to equivalent instructor facilitated web-based modules, for a total equivalent to 48 hours of formalized instruction
  - SOPH 604: the original web-based modules (250 minutes) were retained for DE course delivery; the 525 minutes of face to face sessions were converted to equivalent instructor facilitated web-based sessions, for a total equivalent to 16 hours of formalized instruction.

- Since the web-based version used the same homework/preparation assignments as the face-to-face version, we determined that homework/preparation time required a minimum of 2 hours of work per hour of formalized instruction.
From: Accrediting Commission of the Distance Education and Training Council’s *H.13 Determining Credit Hours* guidance. Example for a 3 SCH course.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Assignments</th>
</tr>
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<tbody>
<tr>
<td>Academic Engagement</td>
<td>Listening to or reading course lectures: 25 pages per hour (1 per week)</td>
</tr>
<tr>
<td></td>
<td>Reading additional website documents: 25 pages per hour (.5 per week)</td>
</tr>
<tr>
<td></td>
<td>Audio and video: 22 pages per hour (1/2 hour per week)</td>
</tr>
<tr>
<td></td>
<td>Reading discussion forums and making responses: 1 hour per week</td>
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<tr>
<td></td>
<td>Presenting and reading student reports: 1 hour per week</td>
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<tr>
<td></td>
<td>Taking quizzes and exams: .5 hours per week</td>
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<td></td>
<td>TOTAL: should be at least 45 hours per semester</td>
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</tbody>
</table>

| Preparation (outside of class)| Required textbooks, ordinary reading level: 30 pages per hour              |
|                               | Required textbooks, difficult reading level: 25 pages per hour              |
|                               | Reaction/reflection papers and book reports: 1 hours per page               |
|                               | Case studies: 1 hour per page                                               |
|                               | Research papers: 3 hours per page                                            |
|                               | Study for quizzes and exams:                                                 |
|                               | Project, journaling, or other assignments:                                  |
|                               | TOTAL: should be at least 90 hours per semester                             |

Overall Total

Should be at least 135 hours for a 3 credit course per semester

The average adult reading rate is 250 words per minute with 70% comprehension. (Smith, Brenca D. “Breaking Through: College Reading” 7th Ed. Longman, 2004)

Reading for learning (100-200 wpm); reading for comprehension (200-400 wpm); and skimming (400-700 wpm). With an average of 400 words per page, at 200 words per minute a student should read around 30 pages per hour (200 words per minute x 60 = 12,000 words per hour divided by 400 = 30 pages per hour). Therefore, we are using 25-30 pages per hour.

Audiobooks are recommended to be 150-160 words per minute or 22 pages per hour.

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1 Accrediting Commission of the Distance Education and Training Council’s *H.13 Determining Credit Hours* guidance available at: [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwijhPW_vs3VAhUq6VQKHXcCDLoFggcMAA&url=http%3A%2F%2Fwww.deac.org%2FUploadedDocuments%2FCritical-Documents%2FHandbook%2520Determination%2520Credit%2520Hours.doc&usg=AFQjCNGu0ghMNZGRuAk89ealTkF1Th12hw](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwijhPW_vs3VAhUq6VQKHXcCDLoFggcMAA&url=http%3A%2F%2Fwww.deac.org%2FUploadedDocuments%2FCritical-Documents%2FHandbook%2520Determination%2520Credit%2520Hours.doc&usg=AFQjCNGu0ghMNZGRuAk89ealTkF1Th12hw)
**Instructor Information**

Course title and number  
SOPH 601: Thinking in Populations: The Public Health Mindset

Term  
Fall 2018

**NOTE:**  
This 2-week 2 SCH course has 32 hours of formalized instruction for face-to-face or distance education delivery.

- Week 1: All students will complete initial course modules on-line, self-paced
  - Instructional modules 1-2 (135 min total)
  - Prepwork/homework modules 1-4
- Week 2: Days 1-5 consist of a total 1455 minutes of formalized instruction

**Course Description**

An intensive case-focused immersion in the distinctive features that define the art and science of public health practice. Through structured activities, didactic sessions, and studio sessions, students will establish a public health mindset and build the foundations—in values, history, methods, the determinants of health, and leadership—necessary for defining and describing the health status of populations, understanding and addressing complex public health issues, and leading initiatives to protect and improve health at the population level. Students will develop a portfolio of professional products and engage in schoolwide activities.

It is the first in a structured four-course series that comprises the MPH core, required for all MPH students.

This is a 2-week, 2 SCH course with 32 hours of formalized instruction for face-to-face or distance education delivery.

**Prerequisites**

Concurrent enrollment in SOPH 602 and SOPH 603 is required

**Course Competencies and Objectives**

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Assessed Competency (See Appendix A)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D1.1. Explain public health history, philosophy and values</td>
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</tbody>
</table>
Describe distinctive feature of the public health approach: (ethics and values, individuals and populations, evidence and uncertainty, science and policy)

D1.2. Identify the core functions of public health and the 10 Essential Services
D1.4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
D1.11. Explain how globalization affects global burdens of disease

Identify and compare leadership styles and their implications for understanding and addressing complex public health issues.

D2.12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
D2.20. Describe the importance of cultural competence in communicating public health content
D2.16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making

**Textbook and/or Resource Material**

No textbook is required. Assigned readings and resources will be posted in eCampus

**Course Topics, Calendar of Activities, Major Assignment Dates**

This 2-week 2 SCH course has 32 hours of formalized instruction for face-to-face or distance education delivery.

- **Week 1:** All students will complete initial course modules on-line, self-paced
  - Instructional modules 1-2 (135 min total)
  - Prepwork/homework modules 1-4
- **Week 2:** Days 1-5 consist of a total 1455 minutes of formalized instruction

**EXAMPLE Calendar of Instruction for Fall 2018:**

<table>
<thead>
<tr>
<th>Week 1: Self paced, on-line for all students Tuesday, August 14- Saturday, August 18</th>
<th>Pre-assessment Leadership and the language of public health</th>
</tr>
</thead>
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Updated 08/01/17 (Fall 2017)
Week 2  
Monday, August 20- Friday August 24  

| Day 1 | (180 minutes instruction) | Values: History, Ethics, and Public Health Practice | Selected readings posted on eCampus QUIZ ONE  

| Day 2 | (330 minutes instruction) | Evidence and Determinants | Selected readings posted on eCampus QUIZ TWO  

| Day 3 | (360 minutes instruction) | Methods 1: Quantitative Foundations | Selected readings posted on eCampus QUIZ THREE  

| Day 4 | (420 minutes instruction) | Methods 2: Qualitative Foundations; Cultural/biological/genetic influences on health status | Selected readings posted on eCampus Portfolio product 3 due no later than start of class, Day 4  
- Journal reflection “diversity/culture” QUIZ FOUR  

| Day 5 | (160 minutes instruction) | Leadership: Synthesis for Public Health Practice  
The wider view: Globalization and Health | Selected readings posted on eCampus Portfolio product 4 due no later than midnight Day 5  
- Resume/CV QUIZ FIVE  

### Grading Policies

- **Satisfactory/Unsatisfactory**  
  - Points **Satisfactory**  
  - Points **Unsatisfactory**  

- **Grading Scale**  
  - 90-100 Points = A  
  - 80-89 Points = B  
  - 70-79 Points = C  
  - 60-69 Points = D  
  - < 60 Points = F  

Course grade is based on the following components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio</td>
<td>70%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Professionalism</td>
<td>10%</td>
</tr>
</tbody>
</table>

Grade components:

I. **Portfolio assignments**: specific deliverable products will be graded according to rubric. These products will be of sufficient quality to be included in the student’s professional portfolio.

II. **Quizzes**: quizzes will be given on reading assignments, class lectures, and discussions.
III. **Professionalism**: this score is based on faculty review/critique rubric of deportment.

While students will work in groups and participation in group activities is an important component of learning, student grades will be based on individual work. Quizzes will be done individually, and each portfolio product is an individual product.

Late work and make-up policies for excused and unexcused absences follow below.

**Attendance and Make-up Policies**

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07).

Regular attendance and participation in classes and group work are essential for learning in this applied course. Your instructors and student peers will hold you to a high standard, as consistent with professional integrity in public health practice.

Accrual of more than one full day's unexcused absence from sessions will result in a drop of one letter grade per missed day on the final course grade.

*Except in cases of University excused absences as described in Student Rule 7:*
- Assignments turned in past the posted due date will result in a loss of points equal to one letter grade per late day (as noted in the assignment's rubric).
- There is no make-up for missed quizzes. Missed quizzes will result in a score of zero for the quiz.

**Other Pertinent Course Information**

Every effort will be made to ensure that power point lecture files, notes, articles and assignments are available online in a timely manner. Written assignments will be delivered thru the Blackboard course website. Handouts, changes in assignments or the schedule of class modules will be announced on the Bb course webpage. E-mail contact will be initiated with all students the first week of class. If you do not have access to your assigned TAMHSC e-mail account, it is your responsibility to make the instructor aware of that fact so that other arrangements may be made. You are expected to use Blackboard e-mail address for all official correspondence.

**eCampus (Blackboard)**

Within the course’s eCampus site you will access the learning materials, tutorials, and syllabus; discuss issues; submit assignments; take quizzes; email other students and the instructor; participate in online activities; and display your projects.

In order to access the course material you will need to go to login into Howdy and then click the eCampus button on the top right or look for Quick Links on the bottom of the School’s homepage or go to [http://ecampus.tamu.edu](http://ecampus.tamu.edu). Please do not contact your instructor with technical problems. If you are having a technical problem with the course, review the Blackboard Learn Tutorials (at the top-right of School’s Office of Academic Assessment and Instructional Technology website). For login issues (password not working), please contact TAMU Help Desk at helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300. Your eCampus login is the same as your Howdy login (NetID).

**Computer Requirements for Online Courses**

For this and all online courses we recommend the minimum technical requirements outlined on our “SPH Computer Requirements for Online Courses” web page, located at [http://www.sph.tamhsc.edu/assessment-instructional/com-requirement.html](http://www.sph.tamhsc.edu/assessment-instructional/com-requirement.html).

All computing problems or other technical issues not related to eCampus, please contact:
• TAMHSC related account: helpdesk@tamhsc.edu via E-mail, or phone to (979) 862-8029
• TAMU related account: helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300

Important!!! Save your work as you go along. Nothing is more discouraging than to lose an assignment due to a computer hang ups! You may want to also make hard copies of your work to have "proof" and save yourself time and trouble!

Plagiarism Virtual Course

Plagiarism is the leading form of academic dishonesty that the School of Public Health has to address. As a SPH student, you are responsible for knowing what plagiarism is and how to avoid it. All SPH students are automatically enrolled in Plagiarism Virtual Course on eCampus. This virtual course provides you with information and examples related to plagiarism in an effort to reduce the number of reported incidents. Please find a tutorial and resources under "Content." In addition, please find Turnitin, a software package that allows you to check whether you may have plagiarized your document. Please see Phuong Huynh: phuong@sph.tamhsc.edu for additional information.

Course Evaluation

Constructive feedback from students on course evaluations is taken very seriously at the School of Public Health. I am asking for your assistance in helping the School in its assessment of courses and faculty through your participation in the evaluation of your courses. As public health professionals you will one day have the responsibility to evaluate colleagues and health initiatives. The School views providing feedback on the School's courses as part of your professional responsibility.

SPH Mission

The Texas A&M School of Public Health is committed to transforming health through interdisciplinary inquiry, innovative solutions, and development of leaders through the Aggie tradition of service to engage diverse communities worldwide.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Academic Integrity

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, TAMU, HSC, and School policies regarding academic integrity and classroom conduct. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work...
previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. A tutorial on this issue is available at: http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html. A plagiarism tutorial can be found in Blackboard. Information on the Aggie Honor Code can be found at http://aggiehonor.tamu.edu.

Remember:
“An Aggie does not lie, cheat, or steal, or tolerate those who do.”

Copyright Statement

The materials used in this course are copyrighted. These materials include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted by the instructor.

FERPA

The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy. By enrolling in this course you agree to the following statement: “I understand that as a result of registering for this course, my HSC/Blackboard assigned e-mail address will be revealed to classmates and the instructor.”

Equal Opportunity Statement

The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 436-9208, email hr@tamhsc.edu, or by mail at 200 Technology Way, College Station, TX 77845.

DISCLAIMER

This syllabus is representative of materials that will be covered in this class; the schedule and topics list are subject to change. These changes will be discussed in class and subsequently communicated via email or posted as announcements. If you have any problems related to this course, please feel free to discuss them with the instructor.

Title IX

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Texas A&M University and the Texas A&M Health Science Center are committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, the University does not discriminate on the basis of sex in its education programs and activities, and it encourages any student or non-student who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct by another student, member of the faculty or staff, or campus visitor or contractor, to immediately report the incident to any of the individuals persons or offices listed below.

WHERE TO REPORT:
James Nachlinger,
Executive Director, Payroll and HR Services
Title IX Coordinator
979-436-9207
nachlinger@tamhsc.edu
The University encourages students to immediately consult with or report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to the TAMHSC Title IX Coordinator. Students may also report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to any School of Public Health administrator, university administrator, official or unit supervisor, who is then responsible for promptly notifying any of the above Title IX coordinators of the reported incident.
APPENDIX A: COMPETENCIES

D1. MPH & DrPH Foundational Public Health Knowledge

Profession & Science of Public Health
D1.1. Explain public health history, philosophy and values
D1.2. Identify the core functions of public health and the 10 Essential Services
D1.3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population’s health
D1.4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
D1.5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
D1.6. Explain the critical importance of evidence in advancing public health knowledge

Factors Related to Human Health
D1.7. Explain effects of environmental factors on a population’s health
D1.8. Explain biological and genetic factors that affect a population’s health
D1.9. Explain behavioral and psychological factors that affect a population’s health
D1.10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
D1.11. Explain how globalization affects global burdens of disease
D1.12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)

D2. MPH Foundational Competencies

Evidence-based Approaches to Public Health
D2.1. Apply epidemiological methods to the breadth of settings and situations in public health practice
D2.2. Select quantitative and qualitative data collection methods appropriate for a given public health context
D2.3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
D2.4. Interpret results of data analysis for public health research, policy or practice

Public Health & Health Care Systems
D2.5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
D2.6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels

Planning & Management to Promote Health
D2.7. Assess population needs, assets and capacities that affect communities’ health
D2.8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
D2.9. Design a population-based policy, program, project or intervention
D2.10. Explain basic principles and tools of budget and resource management
D2.11. Select methods to evaluate public health programs

Policy in Public Health
D2.12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
D2.13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
D2.14. Advocate for political, social or economic policies and programs that will improve health in diverse populations
D2.15. Evaluate policies for their impact on public health and health equity

Updated 08/01/17 (Fall 2017)
Leadership
D2.16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
D2.17. Apply negotiation and mediation skills to address organizational or community challenges

Communication
D2.18. Select communication strategies for different audiences and sectors
D2.19. Communicate audience-appropriate public health content, both in writing and through oral presentation
D2.20. Describe the importance of cultural competence in communicating public health content

Interprofessional Practice
D2.21. Perform effectively on interprofessional teams

Systems Thinking
D2.22. Apply systems thinking tools to a public health issue
New Course Proposal

Date Submitted: 08/16/17 5:27 pm

Viewing: SOPH 602 : Investigation and Control: Acute Public Health Events

Last edit: 09/21/17 12:53 pm
Changes proposed by: danko

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rick Danko</td>
<td><a href="mailto:danko@sph.tamhsc.edu">danko@sph.tamhsc.edu</a></td>
<td>5123414927</td>
</tr>
</tbody>
</table>

Course prefix: SOPH  
Course number: 602

Department: School of Public Health
College/School: Public Health
Academic Level: Graduate
Effective term: 2018-2019

Complete Course Title: Investigation and Control: Acute Public Health Events
Abbreviated Course Title: INV & CNTRL ACUTE PUBL HLTH EV

Catalog course description:
Case-focused, applied study in investigating and responding to acute outbreaks, exposures, disasters or other events that threaten the health of the public; identification and diagnosis of acute public health events, definition of contributing factors, collection and analysis of data, assessment of causality and mapping of logic for mediation, control and prevention; the second of four courses that comprise the MPH core required for all MPH students.

Prerequisites and Restrictions:
SOPH 601 and SOPH 603, or concurrent enrollment.

Concurrent Enrollment: No
Should catalog prerequisites / concurrent enrollment be enforced: Yes

Enforced Prerequisites / Concurrent Enrollment

<table>
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<tr>
<th>And/Or</th>
<th>Course Prefix/Number</th>
<th>Min Grade/Score</th>
<th>Academic Level</th>
<th>Concurrency?</th>
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<td>And</td>
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<td>C</td>
<td>GR</td>
<td>Yes</td>
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<tr>
<td>And</td>
<td>SOPH 603</td>
<td>C</td>
<td>GR</td>
<td>Yes</td>
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Crosslistings: No  
Stacked: No

In Workflow
1. CLPH Reviewer
2. CLPH Department Head
3. Curricular Services Review
4. PH Committee Preparer
5. PH Committee Chair
6. PH College Dean
7. GC Preparer
8. GC Chair
9. Faculty Senate Preparer
10. Faculty Senate
11. Provost II
12. President
13. Curricular Services
14. Banner

Approval Path
1. 08/29/17 10:39 am  
   Erin Schneider  
   (erinschneider): Approved for CLPH Reviewer

2. 08/29/17 10:44 am  
   Jay Maddock  
   (maddock): Approved for CLPH Department Head

3. 09/11/17 11:17 am  
   Sandra Williams  
   (sandra-williams): Approved for Curricular Services Review

4. 09/21/17 12:55 pm  
   Rick Danko (danko): Approved for PH Committee Preparer

5. 09/21/17 12:52 pm  
   Szu-hsuan Lin  
   (micheyszu): Approved for PH Committee Chair

6. 09/21/17 1:52 pm  
   Amy Fairchild  
   (fairchild): Approved for PH College Dean

7. 09/25/17 8:29 am  
   LaRhesa Johnson  
   (lrjohnson): Approved for GC Preparer

8. 10/05/17 3:05 pm  
   LaRhesa Johnson  
   (lrjohnson): Approved for GC Chair
Semester 3 Contact Hour(s) 3 Lecture: 3 Lab: 0 Other: 0 Total 3
Credit Hour(s) (per week):
Repeatable for credit? No
CIP/Fund Code 5122010014
Default Grade Mode Letter Grade(G)
Method of instruction Lecture
Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)
Yes

Learning Outcomes
Meets traditional face-to-face learning outcomes.
Describe how learning outcomes are met or provide justification why they are not met.
See attached.

Hours
Meets traditional face-to-face hours.
Describe how hours are met or provide justification why they are not met.
See attached.

Will this course be taught as a distance education course?
Yes

I verify that I have reviewed the FAQ for Export Control Basics for Distance Education.
Yes

Is 100% of this course going to be taught in Texas?
Yes

Will classroom space be needed for this course?
Yes

This will be a required course or an elective course for the following programs:

<table>
<thead>
<tr>
<th>Program(s)</th>
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<tbody>
<tr>
<td>(MPH-DCSH) Master of Public Health in Occupational Safety and Health</td>
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<tr>
<td>(MPH-PHED) Master of Public Health in Environmental Health</td>
</tr>
<tr>
<td>(MPH-HPCH) Master of Public Health in Health Promotion and Community Health Sciences</td>
</tr>
<tr>
<td>(MPH-PHEB) Master of Public Health in Biostatistics</td>
</tr>
<tr>
<td>(MPH-PHEP) Master of Public Health in Epidemiology</td>
</tr>
<tr>
<td>(MPH-PHPM) Master of Public Health in Health Policy Management</td>
</tr>
</tbody>
</table>

Elective (select program)

Course Syllabus

Syllabus: Upload syllabus
Upload syllabus SOPH_602_Syllabus_POSTED_2.docx

Letters of support or other documentation
Yes

Upload files verification memo for shortened and DE courses SOPH 601,602,603,604.pdf

Additional information Additional attachment provides statement of verification of student learning outcomes (competencies) and semester credit hours for this shortened course and its distance education delivery.
Memorandum August 16, 2016

TO: Graduate Committee

FROM: Jay E. Maddock, PhD
       Dean, School of Public Health

RE: Approval of NEW distance and shortened courses for MPH Core:
    SOPH 601, SOPH 602, SOPH 602 and SOPH 604

The proposed new Public Health Core for the School of Public Health’s Master of Public Health (MPH) degrees consists of four shortened, mostly face-to-face courses:

- SOPH 601 is a two-week, 2 SCH course taught in August, face-to-face with some web-based instructional modules (Fall semester)
- SOPH 602 is a six-week, 3 SCH course taught in the first half of the Fall semester
- SOPH 603 is a six-week, 3 SCH course taught in the second half of the Fall semester
- SOPH 604 is a one-week, 1 SCH course taught in January, face-to-face with some web-based instructional modules (Spring semester)

There will also be fully web-based DE versions of these courses.

There is no traditional 15 week face-to-face version of the course.

Both the shortened and web-based versions have the same learning outcomes, corresponding to Foundation Knowledge and Competencies required by CEPH (Council on Education in Public Health, the accrediting body for schools of public health).

How did the department determine that the courses taught in shortened format meet the same credit hour requirement as face-to-face courses taught in a long semester?

- We identified actual times of formalized instruction in each of the four courses by adding up time for sessions in each:
  - SOPH 601: 1455 minutes face to face, 132 minutes web-based modules -- equivalent to 32 hours of formalized instruction
  - SOPH 602: 2400 minutes of formalized instruction, all face-to-face (four 75 minute classroom sessions and one 100 minute studio session per week for six weeks)— equivalent to 48 hours of formalized instruction.
  - SOPH 603: 2400 minutes of formalized instruction, all face-to-face (four 75 minute classroom sessions and one 100 minute studio session per week for six weeks)— equivalent to 48 hours of formalized instruction.
  - SOPH 604: 525 minutes face to face, 250 minutes web-based modules -- equivalent to 16 hours of formalized instruction.

- We determined homework/preparation time (such reading required materials, viewing videos, exploring websites, gathering information, studying for exams, journaling, writing and reviewing
papers, preparing portfolio projects) with estimates guided by the Accrediting Commission of the Distance Education and Training Council’s H.13 Determining Credit Hours guidance\(^1\) (attached) to ensure a minimum of 2 hours of homework per hour of formalized instruction.

How did the department determine that the courses taught by distance format meet the same credit hour requirement as face-to-face courses taught in a long semester?

Because the shortened courses were determined to meet requirements of courses taught in a long semester, the department adapted the shortened for DE delivery.

- We identified actual times of formalized instruction in each of the four courses by adding up time for sessions in each:
  - SOPH 601: the original web-based modules (132 minutes) were retained for DE course delivery; the 1455 minutes of face to face sessions were converted to equivalent instructor facilitated web-based sessions (such as interactive web-based modules, chat and discussion sessions, student presentation and critique sessions, quizzes) for a total equivalent to 32 hours of formalized instruction.
  - SOPH 602: the course material in the 2400 minutes of face-to-face formalized instruction was converted to equivalent instructor facilitated web-based modules, for a total equivalent to 48 hours of formalized instruction.
  - SOPH 603: the course material in the 2400 minutes of face-to-face formalized instruction was converted to equivalent instructor facilitated web-based modules, for a total equivalent to 48 hours of formalized instruction.
  - SOPH 604: the original web-based modules (250 minutes) were retained for DE course delivery; the 525 minutes of face to face sessions were converted to equivalent instructor facilitated web-based sessions, for a total equivalent to 16 hours of formalized instruction.

- Since the web-based version used the same homework/preparation assignments as the face-to-face version, we determined that homework/preparation time required a minimum of 2 hours of work per hour of formalized instruction.
From: Accrediting Commission of the Distance Education and Training Council’s *H.13 Determining Credit Hours* guidance. Example for a 3 SCH course.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Engagement</td>
<td>Listening to or reading course lectures: 25 pages per hour (1 per week)</td>
</tr>
<tr>
<td></td>
<td>Reading additional website documents: 25 pages per hour (.5 per week)</td>
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<td>Audio and video: 22 pages per hour (1/2 hour per week)</td>
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<td>Reading discussion forums and making responses: 1 hour per week</td>
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<td></td>
<td>Presenting and reading student reports: 1 hour per week</td>
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<tr>
<td></td>
<td>Taking quizzes and exams: .5 hours per week</td>
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<tr>
<td></td>
<td>TOTAL: should be at least 45 hours per semester</td>
</tr>
</tbody>
</table>

| Preparation (outside of class)  | Required textbooks, ordinary reading level: 30 pages per hour             |
|                                 | Required textbooks, difficult reading level: 25 pages per hour             |
|                                 | Reaction/reflection papers and book reports: 1 hours per page              |
|                                 | Case studies: 1 hour per page                                              |
|                                 | Research papers: 3 hours per page                                          |
|                                 | Study for quizzes and exams:                                               |
|                                 | Project, journaling, or other assignments:                                 |
|                                 | TOTAL: should be at least 90 hours per semester                            |

| Overall Total                   | Should be at least 135 hours for a 3 credit course per semester             |

The average adult reading rate is 250 words per minute with 70% comprehension. (Smith, Brenca D. “Breaking Through: College Reading” 7th Ed. Longman, 2004]

Reading for learning (100-200 wpm); reading for comprehension (200-400 wpm); and skimming (400-700 wpm). With an average of 400 words per page, at 200 words per minute a student should read around 30 pages per hour (200 words per minute x 60 = 12,000 words per hour divided by 400 = 30 pages per hour). Therefore, we are using 25-30 pages per hour.

Audibooks are recommended to be 150-160 words per minute or 22 pages per hour.

---

1 Accrediting Commission of the Distance Education and Training Council’s *H.13 Determining Credit Hours* guidance available at: [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwiHjP_PW_vs3VAhUqyVQKHXcCDLSQFggMAA&url=http%3A%2F%2Fwww.deac.org%2FUpload%2FDetermining%2FDetermining%2520Credit%2520Hours.doc&usg=AFQjCNGu0ghNMZGRuAaKkK1eHJkIFTh12lw](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwiHjP_PW_vs3VAhUqyVQKHXcCDLSQFggMAA&url=http%3A%2F%2Fwww.deac.org%2FUpload%2FDetermining%2FDetermining%2520Credit%2520Hours.doc&usg=AFQjCNGu0ghNMZGRuAaKkK1eHJkIFTh12lw)
Instructor Information

Course title and number  SOPH 602: Investigation & Control: Acute Public Health Events
Term Fall 2018

NOTE:

Meeting times and location  This 6-week 3 SCH course has 48 hours of formalized instruction for face-to-face or distance education delivery. Each week consists of four scheduled lecture sessions (75 minutes each) and one applied studio session (100 minutes each).
In this syllabus, “studio” refers to a regularly-scheduled smaller-group session for focused, applied group work.

Instructor Name(s)
Teaching Assistant(s)
Telephone number
Email address
Office hours
Office location

Course Description

A case-focused, applied study in investigating and responding to acute outbreaks, exposures, disasters, or other events that threaten the health of the public. Through didactic sessions, flipped sessions, and studio sessions, students will gain competency in identification and diagnosis of acute public health events in place and time, definition of their contributing factors, collection and analysis of qualitative and quantitative evidence, assessment of causality, and mapping of logic for potential mediation, control, and prevention measures. Students will document public health competency in assigned deliverables for their professional portfolios.

It is the second in a structured four-course series that comprises the MPH core, required for all MPH students.

This is a 6-week, 3 SCH course with 48 hours of formalized instruction for face-to-face or distance education delivery.

Prerequisites

Concurrent enrollment in SOPH 601 and SOPH 603 is required.
## Course Competencies and Objectives

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Assessed Competency (See Appendix A)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diagnose</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Identify, explain and apply public health concepts and perspectives to diagnose acute public health events and their contributing factors. | D1.4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program  
D1.7. Explain effects of environmental factors on a population’s health  
D1.8. Explain biological and genetic factors that affect a population’s health  
D1.9. Explain behavioral and psychological factors that affect a population’s health  
D1.10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities |
| **Analyze**       |                                      |
| Describe public health resources and approaches necessary to build an evidence base.  
Select and apply techniques of investigation to assess causality in acute public health events. | D1.3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population’s health  
D1.6. Explain the critical importance of evidence in advancing public health knowledge  
D2.1. Apply epidemiological methods to the breadth of settings and situations in public health practice  
D2.2. Select quantitative and qualitative data collection methods appropriate for a given public health context  
D2.3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate  
D2.4. Interpret results of data analysis for public health research, policy or practice |
| **Control and Prevent** |                                    |
| Map the logic of potential control measures in acute public health events | D1.5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.  
D2.5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings  
D2.17. Apply negotiation and mediation skills to address organizational or community challenges  
D2.18. Select communication strategies for different audiences and sectors  
D2.19. Communicate audience-appropriate public health content, both in writing and through oral presentation |

### Textbook and/or Resource Material

No textbook is required. Assigned readings and resources will be posted in eCampus
This 6-week 3 SCH course has 48 hours of formalized instruction for face-to-face or distance education delivery. Each week consists of four scheduled lecture sessions (75 minutes each) and one applied studio session (100 minutes each).

**EXAMPLE Calendar of Instruction for Fall 2018**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Readings, Assignments, Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Class sessions 1-4 Studio session 1</td>
<td>The occurrence and distribution of health events in the population</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>WHO Surveillance Ethics Guidelines</strong> and Selected readings posted on eCampus</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>QUIZ ONE</strong></td>
</tr>
<tr>
<td></td>
<td>Class sessions 5-8 Studio session 2</td>
<td>Determinants of health status, risk factors and associated methods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selected readings posted on eCampus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portfolio products 1 &amp; 2 due:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Press Release</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Peer review of Press Release</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>QUIZ TWO</strong></td>
</tr>
<tr>
<td>Week 3</td>
<td>Class sessions 9-12 Studio session 3</td>
<td>Causality and associated methods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Determinants <em>(continued)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selected readings posted on eCampus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portfolio products 3, 4, 5 due:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Logic model,</td>
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<tr>
<td></td>
<td></td>
<td>• Peer review of Logic model</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Public Service Announcement script</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>QUIZ THREE</strong></td>
</tr>
<tr>
<td>Week 4</td>
<td>Class sessions 13-16 Studio session 4</td>
<td>Public health systems and surveillance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Problems of measurement and associated methods</td>
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<tr>
<td></td>
<td></td>
<td><strong>WHO Surveillance Ethics Guidelines</strong> and Selected readings posted on eCampus</td>
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<tr>
<td></td>
<td></td>
<td>Portfolio product 6 due:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Journal reflection</td>
</tr>
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<td></td>
<td><strong>QUIZ FOUR</strong></td>
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<tr>
<td>Week 5</td>
<td>Class sessions 17-20 Studio session 5</td>
<td>Biostatistical methods and strength of evidence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intervention types and intervention methods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selected readings posted on eCampus</td>
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<tr>
<td></td>
<td></td>
<td>Portfolio products 7 &amp; 8 due:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Logic Model 2</td>
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<tr>
<td></td>
<td></td>
<td>• Peer review of Logic Model 2</td>
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<tr>
<td></td>
<td></td>
<td><strong>QUIZ FIVE</strong></td>
</tr>
<tr>
<td>Week 6</td>
<td>Class sessions 21-24 Studio session 6</td>
<td>Ethics and politics of public health</td>
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<tr>
<td></td>
<td></td>
<td>Negotiation and facilitation in public health</td>
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<td></td>
<td></td>
<td><strong>CDC Crisis and Emergency Risk Communication Training (CERC)</strong> and Selected readings posted on eCampus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portfolio products 9 &amp; 10 due:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Press release</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Non-traditional communication media product</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>QUIZ SIX</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>NO FINAL EXAM (Student Rule 8.1)</strong></td>
</tr>
</tbody>
</table>
Grading Policies

☐ Satisfactory/Unsatisfactory

<table>
<thead>
<tr>
<th>Points</th>
<th>Satisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>Unsatisfactory</td>
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</tbody>
</table>

☒ Grading Scale

<table>
<thead>
<tr>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>60-69</td>
<td>D</td>
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<tr>
<td>&lt; 60</td>
<td>F</td>
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</table>

Course grade is based on the following components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio</td>
<td>65%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Professionalism</td>
<td>15%</td>
</tr>
</tbody>
</table>

Grade components:

I. **Portfolio assignments**: specific deliverable products will be graded according to rubric. These products will be of sufficient quality to be included in the student’s professional portfolio.

II. **Quizzes**: quizzes will be given on reading assignments, class lectures, and discussions.

III. **Professionalism**: This composite score is based on peer review/critique rubrics (5%), self review/critique rubrics (5%), faculty review/critique rubric of deportment (5%)

While students will work in groups and group participation is an important component of learning, student grades will be based on individual work. Quizzes will be done individually, and each portfolio product is an individual product.

Late work and make-up policies for excused and unexcused absences follow below.

Attendance and Make-up Policies

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07).

Regular attendance and participation in classes and group work are essential for learning in this applied course. Your instructors and student peers will hold you to a high standard, as consistent with professional integrity in public health practice.

Accrual of more than two unexcused absences from studio sessions will result a drop of one letter grade per missed session on the final course grade.

**Except in cases of University excused absences as described in Student Rule 7:**

- Assignments turned in past the posted due date will result in a loss of points equal to one letter grade per late day (as noted in the assignment’s rubric).
- There is no make-up for missed quizzes. Missed quizzes will result in a score of zero for the quiz.
- There is no make-up for missed group activities. Missed participation in group activities will result in no credit for the activity.
Other Pertinent Course Information

Every effort will be made to ensure that power point lecture files, notes, articles and assignments are available online in a timely manner. Written assignments will be delivered thru the Blackboard course website. Handouts, changes in assignments or the schedule of class modules will be announced on the Bb course webpage. E-mail contact will be initiated with all students the first week of class. If you do not have access to your assigned TAMHSC e-mail account, it is your responsibility to make the instructor aware of that fact so that other arrangements may be made. You are expected to use Blackboard e-mail address for all official correspondence.

eCampus (Blackboard)

Within the course’s eCampus site you will access the learning materials, tutorials, and syllabus; discuss issues; submit assignments; take quizzes; email other students and the instructor; participate in online activities; and display your projects.

In order to access the course material you will need to go to login into Howdy and then click the eCampus button on the top right or look for Quick Links on the bottom of the School's homepage or go to http://ecampus.tamu.edu Please do not contact your instructor with technical problems. If you are having a technical problem with the course, review the Blackboard Learn Tutorials (at the top-right of School’s Office of Academic Assessment and Instructional Technology website). For login issues (password not working), please contact TAMU Help Desk at helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300. Your eCampus login is the same as your Howdy login (NetID).

Computer Requirements for Online Courses

For this and all online courses we recommend the minimum technical requirements outlined on our “SPH Computer Requirements for Online Courses” web page, located at http://www.sph.tamhsc.edu/assessment-instructional/com-requirement.html

All computing problems or other technical issues not related to eCampus, please contact:

- TAMHSC related account: helpdesk@tamhsc.edu via E-mail, or phone to (979) 862-8029
- TAMU related account: helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300

Important!!! Save your work as you go along. Nothing is more discouraging than to lose an assignment due to a computer hang ups! You may want to also make hard copies of your work to have "proof" and save yourself time and trouble!

Plagiarism Virtual Course

Plagiarism is the leading form of academic dishonesty that the School of Public Health has to address. As a SPH student, you are responsible for knowing what plagiarism is and how to avoid it. All SPH students are automatically enrolled in Plagiarism Virtual Course on eCampus. This virtual course provides you with information and examples related to plagiarism in an effort to reduce the number of reported incidents. Please find a tutorial and resources under "Content." In addition, please find Turnitin, a software package that allows you to check whether you may have plagiarized your document. Please see Phuong Huynh: phuong@sph.tamhsc.edu for additional information.

Course Evaluation

Constructive feedback from students on course evaluations is taken very seriously at the School of Public Health. I am asking for your assistance in helping the School in its assessment of courses and faculty through your participation in the evaluation of your courses. As public health professionals you will one day
have the responsibility to evaluate colleagues and health initiatives. The School views providing feedback on the School’s courses as part of your professional responsibility.

**SPH Mission**

The Texas A&M School of Public Health is committed to transforming health through interdisciplinary inquiry, innovative solutions, and development of leaders through the Aggie tradition of service to engage diverse communities worldwide.

**Americans with Disabilities Act (ADA)**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit [http://disability.tamu.edu](http://disability.tamu.edu).

**Academic Integrity**

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, TAMU, HSC, and School policies regarding academic integrity and classroom conduct. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. A tutorial on this issue is available at: [http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html](http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html). A plagiarism tutorial can be found in Blackboard. Information on the Aggie Honor Code can be found at [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu).

Remember: "An Aggie does not lie, cheat, or steal, or tolerate those who do."

**Copyright Statement**

The materials used in this course are copyrighted. These materials include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted by the instructor.

**FERPA**

The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy. By enrolling in this course you agree to the following statement: “I understand that as a result of registering for this course, my HSC/Blackboard assigned e-mail address will be revealed to classmates and the instructor.”

**Equal Opportunity Statement**
The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 436-9208, email hr@tamhsc.edu, or by mail at 200 Technology Way, College Station, TX 77845.

**DISCLAIMER**

This syllabus is representative of materials that will be covered in this class; the schedule and topics list are subject to change. These changes will be discussed in class and subsequently communicated via email or posted as announcements. If you have any problems related to this course, please feel free to discuss them with the instructor.

**Title IX**

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Texas A&M University and the Texas A&M Health Science Center are committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, the University does not discriminate on the basis of sex in its education programs and activities, and it encourages any student or non-student who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct by another student, member of the faculty or staff, or campus visitor or contractor, to immediately report the incident to any of the individuals persons or offices listed below.

**WHERE TO REPORT:**
James Nachlinger,
Executive Director, Payroll and HR Services
Title IX Coordinator
979-436-9207
nachlinger@tamhsc.edu

The University encourages students to immediately consult with or report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to the TAMHSC Title IX Coordinator. Students may also report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to any School of Public Health administrator, university administrator, official or unit supervisor, who is then responsible for promptly notifying any of the above Title IX coordinators of the reported incident.
APPENDIX A: COMPETENCIES

D1. MPH & DrPH Foundational Public Health Knowledge

Profession & Science of Public Health
D1.1. Explain public health history, philosophy and values
D1.2. Identify the core functions of public health and the 10 Essential Services
D1.3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population’s health
D1.4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
D1.5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
D1.6. Explain the critical importance of evidence in advancing public health knowledge

Factors Related to Human Health
D1.7. Explain effects of environmental factors on a population’s health
D1.8. Explain biological and genetic factors that affect a population’s health
D1.9. Explain behavioral and psychological factors that affect a population’s health
D1.10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
D1.11. Explain how globalization affects global burdens of disease
D1.12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)

D2. MPH Foundational Competencies

Evidence-based Approaches to Public Health
D2.1. Apply epidemiological methods to the breadth of settings and situations in public health practice
D2.2. Select quantitative and qualitative data collection methods appropriate for a given public health context
D2.3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
D2.4. Interpret results of data analysis for public health research, policy or practice

Public Health & Health Care Systems
D2.5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
D2.6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels

Planning & Management to Promote Health
D2.7. Assess population needs, assets and capacities that affect communities’ health
D2.8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
D2.9. Design a population-based policy, program, project or intervention
D2.10. Explain basic principles and tools of budget and resource management
D2.11. Select methods to evaluate public health programs

Policy in Public Health
D2.12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
D2.13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
D2.14. Advocate for political, social or economic policies and programs that will improve health in diverse populations
D2.15. Evaluate policies for their impact on public health and health equity
Leadership
D2.16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
D2.17. Apply negotiation and mediation skills to address organizational or community challenges

Communication
D2.18. Select communication strategies for different audiences and sectors
D2.19. Communicate audience-appropriate public health content, both in writing and through oral presentation
D2.20. Describe the importance of cultural competence in communicating public health content

Interprofessional Practice
D2.21. Perform effectively on interprofessional teams

Systems Thinking
D2.22. Apply systems thinking tools to a public health issue
Course Change Request

New Course Proposal

Viewing: SOPH 603 : Assessment and Intervention: Wicked Problems in Public Health

Last edit: 09/21/17 12:54 pm
Changes proposed by: Danko

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rick Danko</td>
<td><a href="mailto:danko@sph.tamhsc.edu">danko@sph.tamhsc.edu</a></td>
<td>5123414927</td>
</tr>
</tbody>
</table>

Course prefix: SOPH  
Course number: 603

Department: School of Public Health
College/School: Public Health
Academic Level: Graduate
Effective term: 2018-2019

Complete Course Title
Assessment and Intervention: Wicked Problems in Public Health

Abbreviated Course Title
ASSESS & INTERV WICKED PROB

Catalog course description
Case-focused, applied study in assessing and intervening in wicked population health problems (multi-faceted, multi-sectoral, large scale public health challenges characterized by scientific uncertainty); unpacking the multiple causes and determinants of a complex problem in affected populations; identification, selection and justification of potential interventions and/or policies; description of methods and measures for assurance and evaluation; the third of four courses that comprise the MPH core required for all MPH students.

Prerequisites and Restrictions
SOPH 601 and SOPH 602, or concurrent enrollment.

Concurrent Enrollment: No
Should catalog prerequisites / concurrent enrollment be enforced? Yes

Enforced Prerequisites / Concurrent Enrollment

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<th>Min Grade/Score</th>
<th>Academic Level</th>
<th>Concurrency?</th>
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<td>GR</td>
<td>Yes</td>
</tr>
<tr>
<td>And</td>
<td>SOPH 602</td>
<td>C</td>
<td>GR</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Crosslistings: No
Crosslisted With: No
Stacked: No
Stacked with: No

In Workflow
1. CLPH Reviewer
2. CLPH Department Head
3. Curricular Services Review
4. PH Committee Preparer
5. PH Committee Chair
6. PH College Dean
7. GC Preparer
8. GC Chair
9. Faculty Senate Preparer
10. Faculty Senate
11. Provost II
12. President
13. Curricular Services
14. Banner

Approval Path
1. 08/29/17 10:39 am Erinn Schneider (erinschneider): Approved for CLPH Reviewer
2. 08/29/17 10:44 am Jay Maddock (maddock): Approved for CLPH Department Head
3. 09/11/17 11:20 am Sandra Williams (sandra-williams): Approved for Curricular Services Review
4. 09/21/17 1:52 pm Amy Fairchild (fairchild): Approved for PH Committee Preparer
5. 09/21/17 1:52 pm LaRhesa Johnson (ljohnson): Approved for PH Committee Chair
6. 09/25/17 8:29 am LaRhesa Johnson (ljohnson): Approved for GC Preparer
7. 10/05/17 3:05 pm LaRhesa Johnson (ljohnson): Approved for GC Chair

https://nextcatalog.tamu.edu/courseleaf/courseleaf.cgi?page=/courseadmin/18019/index.h...
Semester: 3  
Credit Hour(s): 3  
Contact Hour(s): (per week): Lecture: 3  
Lab: 0  
Other: 0  
Total: 3  
Repeatable for credit? No  
CIP/Fund Code: S122010014  
Default Grade Mode: Letter Grade(G)  
Method of instruction: Lecture  
Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education) Yes

Learning Outcomes
Meets traditional face-to-face learning outcomes.

Describe how learning outcomes are met or provide justification why they are not met.
See attached.

Hours
Meets traditional face-to-face hours.

Describe how hours are met or provide justification why they are not met.
See attached.

Will this course be taught as a distance education course?
Yes

I verify that I have reviewed the FAQ for Export Control Basics for Distance Education.
Yes

Is 100% of this course going to be taught in Texas?
Yes

Will classroom space be needed for this course?
Yes

This will be a required course or an elective course for the following programs:

<table>
<thead>
<tr>
<th>Required (select program)</th>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(MPH-OCSH) Master of Public Health in Occupational Safety and Health</td>
<td></td>
</tr>
<tr>
<td>(MPH-PHEO) Master of Public Health in Environmental Health</td>
<td></td>
</tr>
<tr>
<td>(MPH-HPCH) Master of Public Health in Health Promotion and Community Health Sciences</td>
<td></td>
</tr>
<tr>
<td>(MPH-PHEB) Master of Public Health in Biostatistics</td>
<td></td>
</tr>
<tr>
<td>(MPH-PHEP) Master of Public Health in Epidemiology</td>
<td></td>
</tr>
<tr>
<td>(MPH-PHPM) Master of Public Health in Health Policy Management</td>
<td></td>
</tr>
</tbody>
</table>

Elective (select program)

Course Syllabus

Syllabus: Upload syllabus
Upload syllabus: SOPH_603_Syllabus_POSTED_2.docx

Letters of support or other documentation: Yes

Upload files: verification memo for shortened and DE courses SOPH 601,602,603,604.pdf

Additional information: Additional attachment provides statement of verification of student learning outcomes (competencies) and semester credit hours for this shortened course and its distance education delivery.
Memorandum August 16, 2016

TO: Graduate Committee

FROM: Jay E. Maddock, PhD.
Dean, School of Public Health

RE: Approval of NEW distance and shortened courses for MPH Core:
SOPH 601, SOPH 602, SOPH 602 and SOPH 604

The proposed new Public Health Core for the School of Public Health’s Master of Public Health (MPH) degrees consists of four shortened, mostly face-to-face courses:

- SOPH 601 is a two-week, 2 SCH course taught in August, face-to-face with some web-based instructional modules (Fall semester)
- SOPH 602 is a six-week, 3 SCH course taught in the first half of the Fall semester
- SOPH 603 is a six-week, 3 SCH course taught in the second half of the Fall semester
- SOPH 604 is a one-week, 1 SCH course taught in January, face-to-face with some web-based instructional modules (Spring semester)

There will also be fully web-based DE versions of these courses.

There is no traditional 15 week face-to-face version of the course.

Both the shortened and web-based versions have the same learning outcomes, corresponding to Foundation Knowledge and Competencies required by CEPH (Council on Education in Public Health, the accrediting body for schools of public health).

How did the department determine that the courses taught in shortened format meet the same credit hour requirement as face-to-face courses taught in a long semester?

- We identified actual times of formalized instruction in each of the four courses by adding up time for sessions in each:
  - SOPH 601: 1455 minutes face to face, 132 minutes web-based modules -- equivalent to 32 hours of formalized instruction
  - SOPH 602: 2400 minutes of formalized instruction, all face-to-face (four 75 minute classroom sessions and one 100 minute studio session per week for six weeks)— equivalent to 48 hours of formalized instruction.
  - SOPH 603: 2400 minutes of formalized instruction, all face-to-face (four 75 minute classroom sessions and one 100 minute studio session per week for six weeks)— equivalent to 48 hours of formalized instruction.
  - SOPH 604: 525 minutes face to face, 250 minutes web-based modules -- equivalent to 16 hours of formalized instruction.

- We determined homework/preparation time (such reading required materials, viewing videos, exploring websites, gathering information, studying for exams, journaling, writing and reviewing
papers, preparing portfolio projects) with estimates guided by the Accrediting Commission of the Distance Education and Training Council’s H.13 Determining Credit Hours guidance (attached) to ensure a minimum of 2 hours of homework per hour of formalized instruction.

How did the department determine that the courses taught by distance format meet the same credit hour requirement as face-to-face courses taught in a long semester?

Because the shortened courses were determined to meet requirements of courses taught in a long semester, the department adapted the shortened for DE delivery.

• We identified actual times of formalized instruction in each of the four courses by adding up time for sessions in each:
  o SOPH 601: the original web-based modules (132 minutes) were retained for DE course delivery; the 1455 minutes of face to face sessions were converted to equivalent instructor facilitated web-based sessions (such as interactive web-based modules, chat and discussion sessions, student presentation and critique sessions, quizzes) for a total equivalent to 32 hours of formalized instruction
  o SOPH 602: the course material in the 2400 minutes of face-to-face formalized instruction was converted to equivalent instructor facilitated web-based modules, for a total equivalent to 48 hours of formalized instruction
  o SOPH 603: the course material in the 2400 minutes of face-to-face formalized instruction was converted to equivalent instructor facilitated web-based modules, for a total equivalent to 48 hours of formalized instruction
  o SOPH 604: the original web-based modules (250 minutes) were retained for DE course delivery; the 525 minutes of face to face sessions were converted to equivalent instructor facilitated web-based sessions, for a total equivalent to 16 hours of formalized instruction.

• Since the web-based version used the same homework/preparation assignments as the face-to-face version, we determined that homework/preparation time required a minimum of 2 hours of work per hour of formalized instruction.
From: Accrediting Commission of the Distance Education and Training Council’s *H.13 Determining Credit Hours* guidance. Example for a 3 SCH course.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Engagement</td>
<td>Listening to or reading course lectures: 25 pages per hour (1 per week)</td>
</tr>
<tr>
<td></td>
<td>Reading additional website documents: 25 pages per hour (.5 per week)</td>
</tr>
<tr>
<td></td>
<td>Audio and video: 22 pages per hour (1/2 hour per week)</td>
</tr>
<tr>
<td></td>
<td>Reading discussion forums and making responses: 1 hour per week</td>
</tr>
<tr>
<td></td>
<td>Presenting and reading student reports: 1 hour per week</td>
</tr>
<tr>
<td></td>
<td>Taking quizzes and exams: .5 hours per week</td>
</tr>
<tr>
<td></td>
<td>TOTAL: should be at least 45 hours per semester</td>
</tr>
<tr>
<td>Preparation (outside of class)</td>
<td>Required textbooks, ordinary reading level: 30 pages per hour</td>
</tr>
<tr>
<td></td>
<td>Required textbooks, difficult reading level: 25 pages per hour</td>
</tr>
<tr>
<td></td>
<td>Reaction/reflection papers and book reports: 1 hours per page</td>
</tr>
<tr>
<td></td>
<td>Case studies: 1 hour per page</td>
</tr>
<tr>
<td></td>
<td>Research papers: 3 hours per page</td>
</tr>
<tr>
<td></td>
<td>Study for quizzes and exams:</td>
</tr>
<tr>
<td></td>
<td>Project, journaling, or other assignments:</td>
</tr>
<tr>
<td></td>
<td>TOTAL: should be at least 90 hours per semester</td>
</tr>
</tbody>
</table>

**Overall Total**

Should be at least 135 hours for a 3 credit course per semester

The average adult reading rate is 250 words per minute with 70% comprehension. (Smith, Brenca D. “Breaking Through: College Reading” 7th Ed. Longman, 2004)

Reading for learning (100-200 wpm); reading for comprehension (200-400 wpm); and skimming (400-700 wpm). With an average of 400 words per page, at 200 words per minute a student should read around 30 pages per hour (200 words per minute x 60 = 12,000 words per hour divided by 400 = 30 pages per hour). Therefore, we are using 25-30 pages per hour.

Audiobooks are recommended to be 150-160 words per minute or 22 pages per hour.

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1. Accrediting Commission of the Distance Education and Training Council’s *H.13 Determining Credit Hours* guidance available at: [https://www.google.com/url?sa=t&rct=j&esrc=s&source=web&cd=1&ved=0ahUKEwilhPW_vs3VAhUqVQKHXcCDLSQFggoMAA&url=http%3A%2F%2Fwww.deac.org%2FUploadedDocuments%2FCritical-Documents%2FH%2520Determining%2520Credit%2520Hours.doc&usg=AFQjCNGu0ghNMZGRuAk89ealTkFIFTh12lw](https://www.google.com/url?sa=t&rct=j&esrc=s&source=web&cd=1&ved=0ahUKEwilhPW_vs3VAhUqVQKHXcCDLSQFggoMAA&url=http%3A%2F%2Fwww.deac.org%2FUploadedDocuments%2FCritical-Documents%2FH%2520Determining%2520Credit%2520Hours.doc&usg=AFQjCNGu0ghNMZGRuAk89ealTkFIFTh12lw)
Instructor Information

Course title and number: SOPH 603: Assessment and Intervention: Wicked Problems in Public Health

Term: Fall 2018

NOTE:

Meeting times and location: This 6-week 3 SCH course has 48 hours of formalized instruction for face-to-face or distance education delivery. Each week consists of four scheduled lecture sessions (75 minutes each) and one applied studio session (100 minutes each). In this syllabus, “studio” refers to a regularly-scheduled smaller-group session for focused, applied group work.

Instructor Name(s)

Teaching Assistant(s)

Telephone number

Email address

Office hours

Office location

Course Description

A case-focused, applied study in assessing and intervening in wicked population health problems—that is, multi-faceted, multi-sectoral, large scale public health challenges characterized by scientific uncertainty. Through didactic sessions, flipped sessions, and studio sessions, students will gain competency in unpacking the multiple causes and determinants of a complex problem in affected populations; identification, selection, and justification of potential interventions and/or policies; and description of methods and measures for assurance and evaluation to demonstrate impact and accountability. Students will document public health competency in assigned deliverables for their professional portfolios.

It is the third in a structured four-course series that comprises the MPH core, required for all MPH students.

This is a 6-week, 3 SCH course with 48 hours of formalized instruction for face-to-face or distance education delivery.

Prerequisites

Concurrent enrollment in SOPH 601 and SOPH 602 is required.

Course Competencies and Objectives

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Assessed Competency (See Appendix A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpack</td>
<td>D1.8. Explain biological and genetic factors that affect a population’s health</td>
</tr>
</tbody>
</table>
| Describe and analyze wicked problems in public health. | D1.9. Explain behavioral and psychological factors that affect a population’s health  
D1.10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities  
D1.11. Explain how globalization affects global burdens of disease  
D1.12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)  
D2.1. Apply epidemiological methods to the breadth of settings and situations in public health practice  
D2.2. Select quantitative and qualitative data collection methods appropriate for a given public health context  
D2.3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate  
D2.5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings  
D2.6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels  
D2.22. Apply systems thinking tools to a public health issue |
| --- | --- |
| **Judge**  
Evaluate potential interventions and select approach, and justify decision. | D1.1. Explain public health history, philosophy and values  
D2.4. Interpret results of data analysis for public health research, policy or practice  
D2.7. Assess population needs, assets and capacities that affect communities’ health  
D2.8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs  
D2.9. Design a population-based policy, program, project or intervention  
D2.10. Explain basic principles and tools of budget and resource management  
D2.12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence  
D2.13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes  
D2.15. Evaluate policies for their impact on public health and health equity  
D2.16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making  
D2.17. Apply negotiation and mediation skills to address organizational or community challenges |
| **Assure**  
Describe methods for assurance, evaluation, and accountability in interventions. | D2.11. Select methods to evaluate public health programs |
No textbook is required. Assigned readings and resources will be posted in eCampus.

**Course Topics, Calendar of Activities, Major Assignment Dates**

This 6-week 3 SCH course has 48 hours of formalized instruction for face-to-face or distance education delivery. Each week consists of four scheduled lecture sessions (75 minutes each) and one applied studio session (100 minutes each).

**EXAMPLE Calendar of Instruction for Fall 2018**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Class sessions 1-4 Studio session 1</td>
<td>Structural determinants and fundamental causes of health status in wicked problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;Fundamental Causes&quot; and Selected readings posted on eCampus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portfolio product 1 due:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Data collection protocol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>QUIZ ONE</td>
</tr>
<tr>
<td>Week 2</td>
<td>Class sessions 5-8 Studio session 2</td>
<td>Quantitative approaches for identifying and handling statistical difference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social marketing / program planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selected readings posted on eCampus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portfolio product 2 due:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Report on shelf space data collection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>QUIZ TWO</td>
</tr>
<tr>
<td>Week 3</td>
<td>Class sessions 9-12 Studio session 3</td>
<td>Formulating interventions: stakeholder interests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selected readings posted on eCampus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portfolio product 3 and 4 due:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Data memo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Journal reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>QUIZ THREE</td>
</tr>
<tr>
<td>Week 4</td>
<td>Class sessions 13-16 Studio session 4</td>
<td>Ethics, policy, and health systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selected readings posted on eCampus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>QUIZ FOUR</td>
</tr>
<tr>
<td>Week 5</td>
<td>Class sessions 17-20 Studio session 5</td>
<td>Implementing interventions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selected readings posted on eCampus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portfolio product 5 due:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Logic model</td>
</tr>
<tr>
<td></td>
<td></td>
<td>QUIZ FIVE</td>
</tr>
<tr>
<td>Week 6</td>
<td>Class sessions 21-24 Studio session 6</td>
<td>Closing the loop on intervention: assurance, evaluation, and accountability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Global factors and macro impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selected readings posted on eCampus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portfolio products 6 &amp; 7 due:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bill analysis/ legislative response</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Briefing book</td>
</tr>
<tr>
<td></td>
<td></td>
<td>QUIZ SIX</td>
</tr>
</tbody>
</table>

**Textbook and/or Resource Material**

NO FINAL EXAM (Student Rule 8.1)
Grading Policies

☐ Satisfactory/Unsatisfactory

<table>
<thead>
<tr>
<th>Points</th>
<th>Satisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
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</table>

Points | Unsatisfactory
<table>
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</thead>
<tbody>
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<td></td>
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</tbody>
</table>

Grading Scale

| 90-100 Points | A |
| 80-89 Points  | B |
| 70-79 Points  | C |
| 60-69 Points  | D |
| < 60 Points   | F |

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>65%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Professionalism</td>
<td>15%</td>
</tr>
</tbody>
</table>

Grade components:

I. **Portfolio assignments**: specific deliverable products will be graded according to rubric. These products will be of sufficient quality to be included in the student’s professional portfolio.

II. **Quizzes**: quizzes will be given on reading assignments, class lectures, and discussions.

III. **Professionalism**: This composite score is based on peer review/critique rubrics (5%), self review/critique rubrics (5%), faculty review/critique rubrics of deportment (5%)

While students will work in groups and participation in group activities is an important component of learning, student grades will be based on individual work. Quizzes will be done individually, and each portfolio product is an individual product.

Late work and make-up policies for excused and unexcused absences follow below.

Attendance and Make-up Policies

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07).

Regular attendance and participation in classes and group work are essential for learning in this applied course. Your instructors and student peers will hold you to a high standard, as consistent with professional integrity in public health practice.

Accrual of more than two unexcused absences from studio sessions will result a drop of one letter grade per missed session on the final course grade.

**Except in cases of University excused absences as described in Student Rule 7:**

- Assignments turned in past the posted due date will result in a loss of points equal to one letter grade per late day (as noted in the assignment’s rubric).
- There is no make-up for missed quizzes. Missed quizzes will result in a score of zero for the quiz.
- There is no make-up for missed group activities. Missed participation in group activities will result in no credit for the activity.

Other Pertinent Course Information

Every effort will be made to ensure that power point lecture files, notes, articles and assignments are available online in a timely manner. Written assignments will be delivered thru the Blackboard course website. Handouts, changes in assignments or the schedule of class modules will be announced on the Bb
course webpage. E-mail contact will be initiated with all students the first week of class. If you do not have access to your assigned TAMHSC e-mail account, it is your responsibility to make the instructor aware of that fact so that other arrangements may be made. You are expected to use Blackboard e-mail address for all official correspondence.

**eCampus (Blackboard)**

Within the course’s eCampus site you will access the learning materials, tutorials, and syllabus; discuss issues; submit assignments; take quizzes; email other students and the instructor; participate in online activities; and display your projects.

In order to access the course material you will need to go to login into Howdy and then click the eCampus button on the top right or look for Quick Links on the bottom of the School's homepage or go to http://ecampus.tamu.edu Please do not contact your instructor with technical problems. If you are having a technical problem with the course, review the Blackboard Learn Tutorials (at the top-right of School’s Office of Academic Assessment and Instructional Technology website). For login issues (password not working), please contact TAMU Help Desk at helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300. **Your eCampus login is the same as your Howdy login (NetID).**

**Computer Requirements for Online Courses**

For this and all online courses we recommend the minimum technical requirements outlined on our “SPH Computer Requirements for Online Courses” web page, located at http://www.sph.tamhsc.edu/assessment-instructional/com-requirement.html

All computing problems or other technical issues not related to eCampus, please contact:

- TAMHSC related account: helpdesk@tamhsc.edu via E-mail, or phone to (979) 862-8029
- TAMU related account: helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300

**Important!!!** Save your work as you go along. Nothing is more discouraging than to lose an assignment due to a computer hang ups! You may want to also make hard copies of your work to have "proof" and save yourself time and trouble!

**Plagiarism Virtual Course**

Plagiarism is the leading form of academic dishonesty that the School of Public Health has to address. As a SPH student, you are responsible for knowing what plagiarism is and how to avoid it. All SPH students are automatically enrolled in Plagiarism Virtual Course on eCampus. This virtual course provides you with information and examples related to plagiarism in an effort to reduce the number of reported incidents. Please find a tutorial and resources under “Content.” In addition, please find Turnitin, a software package that allows you to check whether you may have plagiarized your document. Please see Phuong Huynh: phuong@sph.tamhsc.edu for additional information.

**Course Evaluation**

Constructive feedback from students on course evaluations is taken very seriously at the School of Public Health. I am asking for your assistance in helping the School in its assessment of courses and faculty through your participation in the evaluation of your courses. As public health professionals you will one day have the responsibility to evaluate colleagues and health initiatives. The School views providing feedback on the School’s courses as part of your professional responsibility.

**SPH Mission**
The Texas A&M School of Public Health is committed to transforming health through interdisciplinary inquiry, innovative solutions, and development of leaders through the Aggie tradition of service to engage diverse communities worldwide.

**Americans with Disabilities Act (ADA)**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit [http://disability.tamu.edu](http://disability.tamu.edu).

**Academic Integrity**

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, TAMU, HSC, and School policies regarding academic integrity and classroom conduct. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student's responsibility to have a clear understanding of how to reference other individuals' work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. A tutorial on this issue is available at: [http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html](http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html). A plagiarism tutorial can be found in Blackboard. Information on the Aggie Honor Code can be found at [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu).

Remember:
“An Aggie does not lie, cheat, or steal, or tolerate those who do.”

**Copyright Statement**

The materials used in this course are copyrighted. These materials include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted by the instructor.

**FERPA**

The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy. By enrolling in this course you agree to the following statement: “I understand that as a result of registering for this course, my HSC/Blackboard assigned e-mail address will be revealed to classmates and the instructor.”

**Equal Opportunity Statement**

The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 436-9208, email hr@tamhsc.edu, or by mail at 200 Technology Way, College Station, TX 77845.

**DISCLAIMER**
This syllabus is representative of materials that will be covered in this class; the schedule and topics list are subject to change. These changes will be discussed in class and subsequently communicated via email or posted as announcements. If you have any problems related to this course, please feel free to discuss them with the instructor.

Title IX

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Texas A&M University and the Texas A&M Health Science Center are committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, the University does not discriminate on the basis of sex in its education programs and activities, and it encourages any student or non-student who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct by another student, member of the faculty or staff, or campus visitor or contractor, to immediately report the incident to any of the individuals persons or offices listed below.

WHERE TO REPORT:
James Nachlinger,
Executive Director, Payroll and HR Services
Title IX Coordinator
979-436-9207
nachlinger@tamhsc.edu

The University encourages students to immediately consult with or report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to the TAMHSC Title IX Coordinator. Students may also report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to any School of Public Health administrator, university administrator, official or unit supervisor, who is then responsible for promptly notifying any of the above Title IX coordinators of the reported incident.
APPENDIX A: COMPETENCIES

D1. MPH & DrPH Foundational Public Health Knowledge

Profession & Science of Public Health
D1.1. Explain public health history, philosophy and values
D1.2. Identify the core functions of public health and the 10 Essential Services
D1.3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
D1.4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
D1.5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
D1.6. Explain the critical importance of evidence in advancing public health knowledge

Factors Related to Human Health
D1.7. Explain effects of environmental factors on a population's health
D1.8. Explain biological and genetic factors that affect a population's health
D1.9. Explain behavioral and psychological factors that affect a population's health
D1.10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
D1.11. Explain how globalization affects global burdens of disease
D1.12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)

D2. MPH Foundational Competencies

Evidence-based Approaches to Public Health
D2.1. Apply epidemiological methods to the breadth of settings and situations in public health practice
D2.2. Select quantitative and qualitative data collection methods appropriate for a given public health context
D2.3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
D2.4. Interpret results of data analysis for public health research, policy or practice

Public Health & Health Care Systems
D2.5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
D2.6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels

Planning & Management to Promote Health
D2.7. Assess population needs, assets and capacities that affect communities’ health
D2.8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
D2.9. Design a population-based policy, program, project or intervention
D2.10. Explain basic principles and tools of budget and resource management
D2.11. Select methods to evaluate public health programs

Policy in Public Health
D2.12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
D2.13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
D2.14. Advocate for political, social or economic policies and programs that will improve health in diverse populations
D2.15. Evaluate policies for their impact on public health and health equity

Updated 08/01/17 (Fall 2017)
D2.16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
D2.17. Apply negotiation and mediation skills to address organizational or community challenges

Communication
D2.18. Select communication strategies for different audiences and sectors
D2.19. Communicate audience-appropriate public health content, both in writing and through oral presentation
D2.20. Describe the importance of cultural competence in communicating public health content

Interprofessional Practice
D2.21. Perform effectively on interprofessional teams

Systems Thinking
D2.22. Apply systems thinking tools to a public health issue
Course Change Request

New Course Proposal

Viewing: SOPH 604 : Framing and Persuasion: Public Health in the Public Sphere

Last edit: 09/21/17 12:54 pm
Changes proposed by: danko

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rick Danko</td>
<td><a href="mailto:danko@sph.tamhsc.edu">danko@sph.tamhsc.edu</a></td>
<td>5123414927</td>
</tr>
</tbody>
</table>

Course prefix  SOPH  
Course number  604
Department  School of Public Health
College/School  Public Health
Academic Level  Graduate
Effective term  2018-2019

Complete Course Title  Framing and Persuasion: Public Health in the Public Sphere
Abbreviated Course Title  FRAMG & PERSUS PUB HLTH PUB SP

Catalog course description
Intensive, case-focused application of foundational public health knowledge and core competencies to a current population health problem; synthesis of evidence from a variety of sources; development and communication of public health content to inform and influence policy formation; demonstration of leadership for effective public health practice; the fourth of four courses that comprise the MPH core required for all MPH students.

Prerequisites and Restrictions
SOPH 601, SOPH 602, and SOPH 603.

Concurrent Enrollment  No
Should catalog prerequisites / concurrent enrollment be enforced?  Yes

Enforced Prerequisites / Concurrent Enrollment

<table>
<thead>
<tr>
<th>And/Or</th>
<th>Course Prefix/Number</th>
<th>Min Grade/Score</th>
<th>Academic Level</th>
<th>Concurrency?</th>
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<td>And</td>
<td>SOPH 601</td>
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<td>GR</td>
<td></td>
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</tbody>
</table>

Crosslistings  No  Crosslisted With

Approval Path

1. 08/29/17 10:39 am  Erin Schneider (erinschneider): Approved for CLPH Reviewer
2. 08/29/17 10:44 am  Jay Maddock (maddock): Approved for CLPH Department Head
3. 09/11/17 11:24 am  Sandra Williams (sandra-williams): Approved for Curricular Services Review
4. 09/21/17 12:55 pm  Szu­hsuan Lin (micheyszu): Approved for PH Committee Preparer
5. 09/21/17 1:52 pm  Amy Fairchild (fairchild): Approved for PH College Dean
6. 09/25/17 8:29 am  LaRhesa Johnson (lrjohnson): Approved for GC Preparer
7. 10/05/17 3:05 pm  LaRhesa Johnson (lrjohnson): Approved for GC Chair

In Workflow
1. CLPH Reviewer
2. CLPH Department Head
3. Curricular Services Review
4. PH Committee Preparer
5. PH Committee Chair
6. PH College Dean
7. GC Preparer
8. GC Chair
9. Faculty Senate Preparer
10. Faculty Senate
11. Provost II
12. President
13. Curricular Services
14. Banner

https://nextcatalog.tamu.edu/courseleaf/courseleaf.cgi?page=/courseadmin/18020/index.h... 10/30/2017
Course Syllabus

Syllabus: Upload syllabus
Upload syllabus SOPH_604_Syllabus_POSTED 2.docx
Letters of support or other documentation Yes
Upload files verification memo for shortened and DE courses SOPH 601,602,603,604.pdf
Additional information
Additional attachment provides statement of verification of student learning outcomes (competencies) and semester credit hours for this shortened course and its distance education delivery.
Memorandum August 16, 2016

TO: Graduate Committee
FROM: Jay E. Maddock, PhD
Dean, School of Public Health

RE: Approval of NEW distance and shortened courses for MPH Core:
SOPH 601, SOPH 602, SOPH 602 and SOPH 604

The proposed new Public Health Core for the School of Public Health’s Master of Public Health (MPH) degrees consists of four shortened, mostly face-to-face courses:

- SOPH 601 is a two-week, 2 SCH course taught in August, face-to-face with some web-based instructional modules (Fall semester)
- SOPH 602 is a six-week, 3 SCH course taught in the first half of the Fall semester
- SOPH 603 is a six-week, 3 SCH course taught in the second half of the Fall semester
- SOPH 604 is a one-week, 1 SCH course taught in January, face-to-face with some web-based instructional modules (Spring semester)

There will also be fully web-based DE versions of these courses.

There is no traditional 15 week face-to-face version of the course.

Both the shortened and web-based versions have the same learning outcomes, corresponding to Foundation Knowledge and Competencies required by CEPH (Council on Education in Public Health, the accrediting body for schools of public health).

How did the department determine that the courses taught in shortened format meet the same credit hour requirement as face-to-face courses taught in a long semester?

- We identified actual times of formalized instruction in each of the four courses by adding up time for sessions in each:
  - SOPH 601: 1455 minutes face to face, 132 minutes web-based modules -- equivalent to 32 hours of formalized instruction
  - SOPH 602: 2400 minutes of formalized instruction, all face-to-face (four 75 minute classroom sessions and one 100 minute studio session per week for six weeks)—equivalent to 48 hours of formalized instruction.
  - SOPH 603: 2400 minutes of formalized instruction, all face-to-face (four 75 minute classroom sessions and one 100 minute studio session per week for six weeks)—equivalent to 48 hours of formalized instruction.
  - SOPH 604: 525 minutes face to face, 250 minutes web-based modules -- equivalent to 16 hours of formalized instruction.

- We determined homework/preparation time (such reading required materials, viewing videos, exploring websites, gathering information, studying for exams, journaling, writing and reviewing
papers, preparing portfolio projects) with estimates guided by the Accrediting Commission of the Distance Education and Training Council's H.13 Determining Credit Hours guidance (attached) to ensure a minimum of 2 hours of homework per hour of formalized instruction.

How did the department determine that the courses taught by distance format meet the same credit hour requirement as face-to-face courses taught in a long semester?

Because the shortened courses were determined to meet requirements of courses taught in a long semester, the department adapted the shortened for DE delivery.

- We identified actual times of formalized instruction in each of the four courses by adding up time for sessions in each:
  - SOPH 601: the original web-based modules (132 minutes) were retained for DE course delivery; the 1455 minutes of face to face sessions were converted to equivalent instructor facilitated web-based sessions (such as interactive web-based modules, chat and discussion sessions, student presentation and critique sessions, quizzes) for a total equivalent to 32 hours of formalized instruction
  - SOPH 602: the course material in the 2400 minutes of face-to-face formalized instruction was converted to equivalent instructor facilitated web-based modules, for a total equivalent to 48 hours of formalized instruction
  - SOPH 603: the course material in the 2400 minutes of face-to-face formalized instruction was converted to equivalent instructor facilitated web-based modules, for a total equivalent to 48 hours of formalized instruction
  - SOPH 604: the original web-based modules (250 minutes) were retained for DE course delivery; the 525 minutes of face to face sessions were converted to equivalent instructor facilitated web-based sessions, for a total equivalent to 16 hours of formalized instruction.

- Since the web-based version used the same homework/preparation assignments as the face-to-face version, we determined that homework/preparation time required a minimum of 2 hours of work per hour of formalized instruction.
From: Accrediting Commission of the Distance Education and Training Council’s *H.13 Determining Credit Hours* guidance. Example for a 3 SCH course.

**Activity**  
**Assignments**

**Academic Engagement**
- Listening to or reading course lectures: 25 pages per hour (1 per week)
- Reading additional website documents: 25 pages per hour (.5 per week)
- Audio and video: 22 pages per hour (1/2 hour per week)
- Reading discussion forums and making responses: 1 hour per week
- Presenting and reading student reports: 1 hour per week
- Taking quizzes and exams: .5 hours per week
- **TOTAL:** should be at least 45 hours per semester

**Preparation (outside of class)**
- Required textbooks, ordinary reading level: 30 pages per hour
- Required textbooks, difficult reading level: 25 pages per hour
- Reaction/reflection papers and book reports: 1 hours per page
- Case studies: 1 hour per page
- Research papers: 3 hours per page
- Study for quizzes and exams:
- Project, journaling, or other assignments:
- **TOTAL:** should be at least 90 hours per semester

**Overall Total**
- **Should be at least 135 hours for a 3 credit course per semester**

The average adult reading rate is 250 words per minute with 70% comprehension. (Smith, Brenca D. “Breaking Through: College Reading” 7th Ed. Longman, 2004)

Reading for learning (100-200 wpm); reading for comprehension (200-400 wpm); and skimming (400-700 wpm). With an average of 400 words per page, at 200 words per minute a student should read around 30 pages per hour (200 words per minute x 60 = 12,000 words per hour divided by 400 = 30 pages per hour). Therefore, we are using 25-30 pages per hour.

Audio books are recommended to be 150-160 words per minute or 22 pages per hour.

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1 Accrediting Commission of the Distance Education and Training Council’s *H.13 Determining Credit Hours* guidance available at:  
https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwijhPW_vs3VAhUqxEVQKHXcCDLsQFgoMAA&url=http%3A%2F%2Fwww.deac.org%2FUploadedDocuments%2FCritical-Docs%2F%2520D%2520Determining%2520Credit%2520Hours.doc&usg=AFQjCNGu0ghNMZGRuAk89ealTkFiTH12lw
Instructor Information

Course title and number
SOPH 604: Framing & Persuasion: Public Health in the Public Sphere

Term
Spring 2019

NOTE:
This 1-week 1 SCH course has 16 hours of formalized instruction for face-to-face or distance education delivery.
• Days 1-4: All students will complete Instructional modules 1-3 on-line, self-paced (250 min total)
• Days 5 and 6 consist of a total 525 minutes of formalized instruction

Instructor Name(s)

Teaching Assistant(s)

Telephone number

Email address

Office hours

Office location

Course Description

An intensive, case-focused application of foundational public health knowledge and core competencies to a current population health problem. Through didactic sessions, flipped sessions, and studio activities, students will synthesize evidence from a variety of sources; develop and communicate public health content to inform and influence policy formation; demonstrate leadership for effective public health practice. Students will document public health competency in assigned deliverables for their professional portfolios and a school-wide activity.

It is the fourth in a structured four-course series that comprises the MPH core, required for all MPH students.

This 1-week 1 SCH course has 16 hours of formalized instruction for face-to-face or distance education delivery.

Prerequisites

SOPH 601, SOPH 602, SOPH 603

Course Competencies and Objectives

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Assessed Competency (See Appendix A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthesize evidence and anecdote from a variety of sources to inform and persuade</td>
<td>D1.6. Explain the critical importance of evidence in advancing public health knowledge</td>
</tr>
</tbody>
</table>
| Communicate audience-appropriate public health content | D2.12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence  
D2.14. Advocate for political, social or economic policies and programs that will improve health in diverse populations  
D2.18. Select communication strategies for different audiences and sectors  
D2.19. Communicate audience-appropriate public health content, both in writing and through oral presentation  
D2.20. Describe the importance of cultural competence in communicating public health content |
| Express and demonstrate elements of leadership for effective performance in public health practice | D2.16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making |

**Textbook and/or Resource Material**

No textbook is required. Assigned readings and resources will be posted in eCampus

**Course Topics, Calendar of Activities, Major Assignment Dates**

This 1-week 1 SCH course has 16 hours of formalized instruction for face-to-face or distance education delivery.
- Days 1-4: All students will complete Instructional modules 1-3 on-line, self-paced (250 min total)
- Days 5 and 6 consist of a total 525 minutes of formalized instruction

**EXAMPLE Calendar of Instruction for Spring 2019**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Reading</th>
</tr>
</thead>
</table>
| Day 1 Sunday, January 6 through Day 4 Wednesday, January 9 | Framing arguments for public health policy | Selected course materials posted on eCampus, open on Sunday, January 6  
On line Instructional modules 1-3 DUE before midnight Wednesday, January 9  
Portfolio product 1 due before midnight Wednesday, January 9:  
- Written Public Hearing Statement |
| Day 5 Thursday, January 10 | Persuasion in a public setting: public testimony presentations | Selected readings posted on eCampus |

Updated 08/01/17 (Fall 2017)
Session 1: 9-12:00  
Session 2: 2-5:00

Day 6  
Friday, January 11
Session 1: 9-11:00  
Session 2: 1:30-2:30  
Session 3: 3:30- 5:00
Development, presentation, and reflection on Leadership Credo  
NO FINAL EXAM (Student Rule 8.1)
Selected readings posted on eCampus  
Portfolio product 2 due:  
- Personal Leadership Credo;  
Portfolio product 3 due:  
- Final reflection based on Credo exercise

Grading Policies

☐ Satisfactory/Unsatisfactory
Points Satisfactory
Points Unsatisfactory

☐ Grading Scale
90-100 Points = A  
80-89 Points = B  
70-79 Points = C  
60-69 Points = D  
< 60 Points = F

Course grade is based on the following components:

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>85%</th>
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<tbody>
<tr>
<td>Professionalism</td>
<td>15%</td>
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</tbody>
</table>

Grade components:
I. Portfolio assignments: specific deliverable products will be graded according to rubric. These products will be of sufficient quality to be included in the student’s professional portfolio.

II. Professionalism: This composite score is based on public speaking rubric by faculty (5%), public speaking rubric by self (5%), faculty review/critique rubric of deportment (5%)

While students will work in groups and participation in group activities is an important component of learning, student grades will be based on individual work. Each portfolio product is an individual product.

Late work and make-up policies for excused and unexcused absences follow below.

Attendance and Make-up Policies

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at http://student-rules.tamu.edu/rule07.

Regular attendance and participation in classes and group work are essential for learning in this applied course. Your instructors and student peers will hold you to a high standard, as consistent with professional integrity in public health practice.

Accrual of more than one half day’s unexcused absence from sessions will result in a drop of one letter grade per missed half day on the final course grade.
Except in cases of University excused absences as described in Student Rule 7:

- Assignments turned in past the posted due date will result in a loss of points equal to one letter grade per late day (as noted in the assignment's rubric).
- There is no make-up for missed quizzes. Missed quizzes will result in a score of zero for the quiz.
- There is no make-up for missed group activities. Missed participation in group activities will result in no credit for the activity.

Other Pertinent Course Information

Every effort will be made to ensure that power point lecture files, notes, articles and assignments are available online in a timely manner. Written assignments will be delivered thru the Blackboard course website. Handouts, changes in assignments or the schedule of class modules will be announced on the Bb course webpage. E-mail contact will be initiated with all students the first week of class. If you do not have access to your assigned TAMHSC e-mail account, it is your responsibility to make the instructor aware of that fact so that other arrangements may be made. You are expected to use Blackboard e-mail address for all official correspondence.

eCampus (Blackboard)

Within the course’s eCampus site you will access the learning materials, tutorials, and syllabus; discuss issues; submit assignments; take quizzes; email other students and the instructor; participate in online activities; and display your projects.

In order to access the course material you will need to go to login into Howdy and then click the eCampus button on the top right or look for Quick Links on the bottom of the School’s homepage or go to http://ecampus.tamu.edu Please do not contact your instructor with technical problems. If you are having a technical problem with the course, review the Blackboard Learn Tutorials (at the top-right of School’s Office of Academic Assessment and Instructional Technology website). For login issues (password not working), please contact TAMU Help Desk at helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300. Your eCampus login is the same as your Howdy login (NetID).

Computer Requirements for Online Courses

For this and all online courses we recommend the minimum technical requirements outlined on our “SPH Computer Requirements for Online Courses” web page, located at http://www.sph.tamhsc.edu/assessment-instructional/com-requirement.html

All computing problems or other technical issues not related to eCampus, please contact:

- TAMHSC related account: helpdesk@tamhsc.edu via E-mail, or phone to (979) 862-8029
- TAMU related account: helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300

Important!!! Save your work as you go along. Nothing is more discouraging than to lose an assignment due to a computer hang ups! You may want to also make hard copies of your work to have "proof" and save yourself time and trouble!

Plagiarism Virtual Course

Plagiarism is the leading form of academic dishonesty that the School of Public Health has to address. As a SPH student, you are responsible for knowing what plagiarism is and how to avoid it. All SPH students are automatically enrolled in Plagiarism Virtual Course on eCampus. This virtual course provides you with information and examples related to plagiarism in an effort to reduce the number of reported incidents.
Please find a tutorial and resources under "Content." In addition, please find Turnitin, a software package that allows you to check whether you may have plagiarized your document. Please see Phuong Huynh: phuong@sph.tamhsc.edu for additional information.

Course Evaluation

Constructive feedback from students on course evaluations is taken very seriously at the School of Public Health. I am asking for your assistance in helping the School in its assessment of courses and faculty through your participation in the evaluation of your courses. As public health professionals you will one day have the responsibility to evaluate colleagues and health initiatives. The School views providing feedback on the School’s courses as part of your professional responsibility.

SPH Mission

The Texas A&M School of Public Health is committed to transforming health through interdisciplinary inquiry, innovative solutions, and development of leaders through the Aggie tradition of service to engage diverse communities worldwide.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Academic Integrity

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, TAMU, HSC, and School policies regarding academic integrity and classroom conduct. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. A tutorial on this issue is available at: http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html. A plagiarism tutorial can be found in Blackboard. Information on the Aggie Honor Code can be found at http://aggiehonor.tamu.edu.

Remember:
"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Copyright Statement

The materials used in this course are copyrighted. These materials include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted by the instructor.

FERPA

The Federal Education Rights & Privacy Act requires that we advise students that by registering for this
course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy. By enrolling in this course you agree to the following statement: “I understand that as a result of registering for this course, my HSC/Blackboard assigned e-mail address will be revealed to classmates and the instructor.”

**Equal Opportunity Statement**

The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 436-9208, email hr@tamhsc.edu, or by mail at 200 Technology Way, College Station, TX 77845.

**DISCLAIMER**

This syllabus is representative of materials that will be covered in this class; the schedule and topics list are subject to change. These changes will be discussed in class and subsequently communicated via email or posted as announcements. If you have any problems related to this course, please feel free to discuss them with the instructor.

**Title IX**

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Texas A&M University and the Texas A&M Health Science Center are committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, the University does not discriminate on the basis of sex in its education programs and activities, and it encourages any student or non-student who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct by another student, member of the faculty or staff, or campus visitor or contractor, to immediately report the incident to any of the individuals persons or offices listed below.

WHERE TO REPORT:
James Nachlinger,
Executive Director, Payroll and HR Services
Title IX Coordinator
979-436-9207
nachlinger@tamhsc.edu

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D2. MPH Foundational Competencies

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Updated 08/01/17 (Fall 2017)
Leadership
D2.16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
D2.17. Apply negotiation and mediation skills to address organizational or community challenges

Communication
D2.18. Select communication strategies for different audiences and sectors
D2.19. Communicate audience-appropriate public health content, both in writing and through oral presentation
D2.20. Describe the importance of cultural competence in communicating public health content

Interprofessional Practice
D2.21. Perform effectively on interprofessional teams

Systems Thinking
D2.22. Apply systems thinking tools to a public health issue