CBM003 ADD/CHANGE FORM

	or	
☒ **Undergraduate Council** ☐ New Course ☒ Course Change **Core Category:** <u>Soc Behv Sci</u> **Effective Fall 2013**		**Graduate/Professional Studies Council** ☐ New Course ☐ Course Change **Effective Fall** <u>2013</u>

1. Department: <u>HDCS</u>   College: <u>TECH</u>   **APPROVED SEP - 4 2013**
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2. Faculty Contact Person: <u>Barbara Stewart</u>   Telephone: <u>3-4119</u>   Email: <u>bstewart@uh.edu</u>

3. Course Information on New/Revised course:
   - Instructional Area / Course Number / Long Course Title:
     <u>TECH</u> / <u>1313</u> / <u>Impact of Modern Technology on Society</u>

   - Instructional Area / Course Number / Short Course Title (30 characters max.)
     <u>TECH</u> / <u>1313</u> / <u>IMPACT MODERN TECH ON SOCIETY</u>

   - SCH: <u>3.00</u>   Level: <u>FR</u>   CIP Code: <u>15.0000.00 19</u>   Lect Hrs: <u>3</u>   Lab Hrs: <u>0</u>

4. Justification for adding/changing course: **To meet core curriculum requirements**

5. Was the proposed/revised course previously offered as a special topics course? ☐ Yes ☒ No
   If Yes, please complete:
   - Instructional Area / Course Number / Long Course Title:
     _ / ___ /

   - Course ID: _____   Effective Date (currently active row): _____

6. Authorized Degree Program(s): <u>UH Core</u>
   - Does this course affect major/minor requirements in the College/Department?   ☐ Yes ☒ No
   - Does this course affect major/minor requirements in other Colleges/Departments?   ☐ Yes ☒ No
   - Can the course be repeated for credit?   ☐ Yes ☒ No (if yes, include in course description)

7. Grade Option: <u>Letter (A, B, C ...)</u>   Instruction Type: <u>lecture ONLY</u>   (Note: Lect/Lab info. must match item 3, above.)

8. If this form involves a change to an existing course, please obtain the following information from the course inventory: Instructional Area / Course Number / Long Course Title
   <u>TECH</u> / <u>1313</u> / <u>Impact Modern Technology on Society</u>

   - Course ID: <u>43622</u>   Effective Date (currently active row): <u>8212006</u>

9. Proposed Catalog Description: (If there are no prerequisites, type in "none".)
   Cr: 3. (3-0). Prerequisites: Credit for or concurrent enrollment in communication and mathematics core courses.   Description (30 words max.): Impact of modern technology on ethical, legal, moral, cultural and social behavior standards of society. Basic social/behavioral scientific research methods and review of the technologies.

10. Dean's Signature: _____   Date: <u>10/11/12</u>

    Print/Type Name: <u>Fred Lewallen, Associate Dean of Academic Affairs</u>

REQUEST FOR COURSES IN THE CORE CURRICULUM

Originating Department or College: HDCS/Technology

Person Making Request: Barbara Stewart   Telephone: (713) 743-4119

Email: bstewart@uh.edu

Dean's Signature: Date: 9/8/12

Course Number and Title: TECH 1313 Impact of Modern Technology on Society

Please attach in separate documents:

☒ Completed CBM003 Add/Change Form with Catalog Description

☒ Syllabus

List the student learning outcomes for the course (Statements of what students will know and be able to do as a result of taking this course. See appended hints for constructing these statements):

Upon successful completion of the course work, students are expected to:

(1) describe the contemporary and emergent states of scientific and technological innovation and development as well as their potential future impact(s) on ethical, legal, moral, cultural and social behavioral standards of society

(2) conduct basic research to include discovery, evaluation and (tentative) conclusion(s) on scientific and technological issues at the global, industry and enterprise levels

(3) develop and present two plausible forecasts for a designated future time period.

Component Area for which the course is being proposed (check one):

*Note: If you check the Component Area Option, you would need to also check a Foundational Component Area.

☐ Communication	☐ American History
☐ Mathematics	☐ Government/Political Science
☐ Language, Philosophy, & Culture	☒ Social & Behavioral Science
☐ Creative Arts	☐ Component Area Option
☐ Life & Physical Sciences	

Competency areas addressed by the course (refer to appended chart for competencies that are required and optional in each component area):

☒ Critical Thinking   ☐ Teamwork

☒ Communication Skills   ☒ Social Responsibility

☒ Empirical & Quantitative Skills   ☐ Personal Responsibility

Because we will be assessing student learning outcomes across multiple core courses, assessments assigned in your course must include assessments of the core competencies. For each competency checked above, indicated the specific course assignment(s) which, when completed by students, will provide evidence of the competency. Provide detailed information, such as copies of the paper or project assignment, copies of individual test items, etc. A single assignment may be used to provide data for multiple competencies.

Critical Thinking:
Students are asked to identify trends influencing the future of the topic they chose for their technology forecast and analyze the implications of those trends
Sample Assignment: Trends
A trend is a long-term, continuous change over time that could be put on a graph if you had the data.
NOTE: Each trend statement should begin with a "descriptor" of change: increasing, decreasing, and such. For example, the rate of adoption for mobile e-commerce is increasing.
List the five most important trends in your domain.
Finally, using the template, identify two aspects of each trend. What do you have to assume (about some other condition or trend) for that trend to continue to your time horizon (the forecasted timeframe)? Include up to three assumptions, if you wish.
What are the implications (about some other condition or trend) if that trend does continue to the time horizon? In other words, what else will change if that trend continues? Include up to three implications, if you wish.
Post using the attached template.

Communication Skills:
Students are asked to identify and summarize the key changes and issues in their technology forecast project and to present them to the class using PowerPoint presentation format.
Sample Assignment: Presenting the Forecast Project
Briefly summarize the future of your domain in one Powerpoint slide (each student presents to the full class)
Using attached PPT slide template, tell us the title and briefly summarize your domain.
Describe the 3 most significant changes likely over the next decade
Identify the single most dramatic potential change (even if not likely)
Identify the most significant issue your domain raises for society.

Empirical & Quantitative Skills:
Students do nine journal postings over the course of the semester, which consist of the following:
Sample Journal Discussion posting:

Instructions: The journal is about finding new developments in your domain (topic area). That means articles, blog posts, videos, within the last year or two that talk about new developments. So, if you were doing fuel cells, it might be an article about a new catalyst material that is low cost. This would qualify as "news." It is not about "how fuel cells work." That would be what we call background research. The journal focuses exclusively on being able to locate new developments in your domain in order to help you create a forecast for how your domain might look in the future.

You can find the new developments wherever you like on the Web or in the library or wherever. Some help for you is provided under "Web Links" in Blackboard. There you will find a category called **News Sources**. These resources are good to scan for news (new developments) in your domain. Once you find a new development, you simply summarize the new development in a couple of sentences, and then add another sentence or two on why you think it's important to your domain, and include the link to the article/story/site/etc. For example, *"This article talks about a new catalyst material for fuel cells. The material is a nano-alloy (whatever). Catalysts are the most expensive part of the fuel cells, so if this development pans out, it could bring down the cost of fuel cells and make them more competitive with gasoline engines, see. www.linktofuelcellstory.com"*

The kinds of developments to look for:

a. Locate a dataset, graph or other empirical data that illustrates an <u>important change occurring</u> in [your technology area]. Explain how this change may affect the domain's future.

b. Locate an informative descriptive piece that analyzes change in [your technology area] (with empirical support, if possible) and provide a <u>forecast of the expected future</u> for [your technology area].

c. Locate an descriptive piece that analyzes an uncertainty in [your technology area] and provide a <u>forecast of an alternative future</u> for [your technology area].

d. Locate a proposal piece that contains a specific recommendation, proposal or plan for creating a <u>more preferable future</u> for [your technology area]. Explain how this future is more preferred.

Teamwork:
Click here to enter text.

Social Responsibility:
Students are asked to write an essay describing what they think is the best and most plausible outcome for the technology they forecasted over the course of the semester and why.

FINAL EXAM Part 2. (50% of grade).

<u>The Preferred Future of Your Domain.</u> Imagine that the President has just put together a commission to explore the future of your domain in 2025. Write a 1000-word memorandum to that commission that suggests how your domain could be better in 2025, describing what the domain could look like in 2025 and outlining the pathway from the present to that future--that is, what would have to happen between now and 2025 to achieve the future that you feel is the preferable or best possible one. PLEASE NOTE: Your description of the preferred future needs to be your best estimate of what is plausible, that is, what could actually happen—so, no describing a world of bunnies and rainbows where everyone sings and holds hands ☺. And no alien landings. In your memorandum, you should include the following

items.

A description of your preferred future--what you think is the best plausible or realistic outcome.

1. Specific events or developments that would have to happen along the way for that future outcome to happen.
2. Note the current conditions that exist. Identify what current conditions need to be changed and how they need to be changed.
3. Note the current trends that exist. Identify what trends will need to be changed and how they need to be changed.
4. Identify any other potential obstacles to achieving your desired outcome, such as resistance from key stakeholders, necessary technical developments that may not happen, or any other potential risks.
5. Explain the reasons why your future outcome is better than the most likely outcome if the current conditions and trends do not change.

Personal Responsibility:
Click here to enter text.

Will the syllabus vary across multiple section of the course?　　☐ Yes　　　　☒ No

If yes, list the assignments that will be constant across sections:
Click here to enter text.

Inclusion in the core is contingent upon the course being offered and taught at least once every other academic year. Courses will be reviewed for renewal every 5 years.

The department understands that instructors will be expected to provide student work and to participate in university-wide assessments of student work. This could include, but may not be limited to, designing instruments such as rubrics, and scoring work by students in this or other courses. In addition, instructors of core courses may be asked to include brief assessment activities in their course.

Dept. Signature: _____

TECH 1313 – Impact of Modern Technology on Society
Fall 2012
Hybrid Class
- **Face-to-face Class: CAM 101 Tuesdays 10-11:30**
- **Online:** Class is on the online Blackboard platform, so the primary emphasis is online. We will meet F2F on Tuesdays only (except we may meet F2F on a Thursday near the end of the semester or Presentations). We will use class time to discuss the week's topic, readings, and activities.

Instructor: Andy Hines
E-mail address: ahines@uh.edu
Office Hours: Cam 227D by appointment

Course Description
(Catalog) TECH 1313 - Impact of Modern Technology on Society Cr. 3. (3-0). Impact of modern technology on ethical, legal, moral, cultural and social behavior standards of society. Basic social/ behavioral scientific research methods and review of the technologies. **Prerequisites:** credit for or concurrent enrollment in communication and mathematics core courses.

Textbook
Winston, Morton E. and Ralph D. Edelbach. 2009. *Society, Ethics, and Technology* (4th Edition). Belmont, CA: Wadsworth Cengage Learning. [ISBN: 13: 987-0-495-50467-2] **Available at UH bookstore**

Course Goals

The objective of this course is to facilitate the development of "technological citizenship" such that participation in scientific and technological decisions is premised on an informed scientific and technological literacy foundation.

The key deliverable of the course is a framework forecast. Students will select a technology topic to research and forecast.

Student Learning Outcomes

Upon successful completion of the course work, students are expected to:
- describe the contemporary and emergent states of scientific and technological innovation and development as well as their potential future impact(s) on ethical, legal, moral, cultural and social behavioral standards of society.
- conduct basic research to include discovery, evaluation and (tentative) conclusion(s) on scientific and technological issues at the global, industry and enterprise levels.
- develop and present two plausible forecasts for a designated future time period.

Course Content
Required Readings

- Textbook and posted online readings as preparation for peer-to-peer (P2P) exchanges

Weekly assignments
- Reading assignments are identified in the Course Schedule. Assigned **learning activities** are due before class on Tuesday morning. A separate "schedule" document provides specific help on this.

- For the **Journal News** students are expected to post a "news" piece about future developments in their topic area.

Forecasting Project
- Developing and communicating a forecast is the major project of this course and accounts for 50% of your grade. Your domain (topic) of interest must have instructor approval before you continue the Forecasting Project assignments. The forecast project consists of **Framework Assignments** posted to "Assignments" in Blackboard. At the end of the session, students will give a 3-minute presentation of their key findings:
  - Framework: Technology Domain Selection (this one posted to Discussions)
  - Framework: Current Conditions
  - Framework: Stakeholders List
  - Framework: Historical Timeline (dipity.com)
  - Framework: Trends
  - Framework: Baseline Future
  - Framework: Key Uncertainties
  - Framework: Alternative Future
  - Framework Presentation Slide

Exams

- Mid-term exam is scheduled for the **Tuesday October 16** class.
- Final exam is scheduled for **Tuesday, December 18, 11am-2pm.**

Course Schedule (separate "Schedule" document in Key Documents folder on Blackboard)

Grading Weights

Major Project: Forecast	50%
Weekly Discussion Posts	30%
Examinations	20%

VI. Course Format and Teaching Methodologies

- The **course methodology** is blended: face-to-face (F2F) lecture/discussion with offline self-directed learning

- **Academic honesty strictly applies.** The University of Houston's Honor Code states, "We will be honest in all our academic activities and will not tolerate dishonesty." Students are expected to do original work. Penalties include failure of the entire assignment (zero points) and referral to the department chair for consideration of additional action. Review the **UH Student Handbook** for specifics, particularly, the language and intent of Items d, f and n of Article 3.

  - All work you submit for this course is accepted as your own work, unless otherwise understood and approved by the instructor.
  - You may not, without proper citation and approval of the instructor, submit work that has been copied, wholly or partially, from another student's paper, notebook, or exam. Nor may you, without proper citation, submit work that has been copied, wholly or partially, from a book, article, essay, newspaper, the Internet, or any other written, printed, or media source, whether or not the material in question is copyrighted.

- Written work that paraphrases any written or printed media material without acknowledgment may not be submitted for a course. Ideas from books and essays may be incorporated in your work as starting points, governing issues, illustrations, and the like, but in each case the source must be cited.

- In accordance with the University policy, if the student has a **documented disability** and requires accommodations to obtain equal access in this course, he or she should contact the instructor at the beginning of the semester and make this need known. For information about services provided by The Center for Students with Disabilities, please, call 713-743-5480.

- **Tutor Assistance**. Learning Support Services, a part of the Counseling and Testing Service, provides small group and individualized peer-tutorial instruction. These services, supported by student service fees, are located on the third floor of the Social Work Building. For specific information, call 713-743-5411.

- Using a **computer** for note taking during class is fine.

- **Expectations about use of e-mail & BlackBoard Vista**: The use of University e-mail and Blackboard Vista is vital to this course. All course information will come primarily from Blackboard, with the F2F class supporting the online material.

VI. Grading Evaluation

100 – 90% of total points available (A)
89 – 80% (B)
79 – 70% (C)
69 – 60% (D)
Below 59% (F)

Incomplete: A grade of 'I' is given only in special circumstances at the instructor's discretion.

Withdrawals: Nov 2 is the last day to drop a course or withdraw with a 'W."