# Office of the President California State University, Chico

## **Executive Memorandum 21-015**

March 16, 2021



From: Gayle E. Hutchinson, President

**Subject:** Approval of the New General Education Minor in Science, Technology, and Society

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Upon the recommendation of the Academic Senate, and with the concurrence of the Provost, I approve the new GE Minor in Science, Technology, and Society within the General Education Program, effective fall 2022. Per EM 19-021, "Upon completion of nine units from designated courses in an upper-division Pathway and an additional nine units from designated courses in lower-division GE, students will be awarded a GE Minor with the same name as the upper-division Pathway."

Policy Title:	EM 21-015 GE Minor in Science, Technology, and Society
Contact:	Undergraduate Education
Supersedes:	
Revision:	
<b>Enabling Legislation or</b>	
<b>Executive Order:</b>	

## **New GE Minor Signature Form**

GE Minor Name: General Education Minor in Science, Technology, and Society

**Rationale:** EM 19-021 calls for "a process of revising the number and/or title of upper-division Pathways and corresponding GE Minors and designating the lower- and upper-division courses that will count for each GE Minor." All ten existing existing minors have been discontinued, and this one of ten new minors added in their place. For a list of the extensive consultation that guided CAB's implementation of EM 19-021, please see CAB's website: https://www.csuchico.edu/ge/2021/consultation.shtml

#### **Required Signatures**

Jan Mi	September 1, 2020	
CAB Committee Chair	Date	
Kate McCarthy	September 1, 2020	
Dean of Undergraduate Education	Date	
Send signature page with proposal attached to Cur	riculum Services at Undergraduate Educatio	n, zip 680
Curriculum Review Completed	9/2/2020	
	Date	

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#### **Proposal for a New Minor:**

## General Education Minor in Science, Technology, and Society

Recommended by the Curriculum Advisory Board to EPPC, March 22, 2020

The Academic Senate (EM 19-021) charged CAB with "revising the number and/or title of upper-division Pathways and corresponding GE Minors and designating the lower- and upper-division courses that will count for each GE Minor" for Fall 2021 implementation. As instructed by Senate, "in 2019-20, CAB will propose changes to existing GE Minors to EPPC," and during this process, no courses that currently have GE status, including "experimental courses," will forfeit their status. On March 10, following months of transparent consultation, including publicly announced committee and subcommittee meetings, and after incorporating feedback from two EPPC Discussion Items on February 20 and March 5, CAB voted to approve 10 GE Minors to recommend to EPPC.

For more information about consultation and transparency, see: <a href="https://www.csuchico.edu/ge/2021/consultation.shtml">https://www.csuchico.edu/ge/2021/consultation.shtml</a> <a href="https://www.csuchico.edu/ge/2021/implementation.shtml">https://www.csuchico.edu/ge/2021/implementation.shtml</a>

For more information about the ten recommended GE Minors, see: <a href="https://www.csuchico.edu/ge/2021/campus-feedback.shtml">https://www.csuchico.edu/ge/2021/campus-feedback.shtml</a> <a href="https://www.csuchico.edu/ge/2021/ge-minor-descriptions.shtml">https://www.csuchico.edu/ge/2021/ge-minor-descriptions.shtml</a>

(NOTE: Abbreviated new minor proposal form approved for use with GE minors by the Senate Executive Committee - crossed out items not required for GE Minors)

- I. Proposed title of new minor. General Education Minor in Science, Technology, and Society
- H. Academic year of intended implementation.
- III. Name of the department and college submitting the proposal; identify unit with primary responsibility for the minor.
- IV. Statements on questions of need and demand.
  - A. Relation of the minor to the University Strategic Plan.
  - B. Need for the proposed minor.
  - C. Identify other closely related curricula currently offered by the campus.
    - 1. Explain the impact the proposed minor will have on these programs.
    - 2. Explain how current programs do not meet the proposed minor's objectives.

In a report to the Academic Senate on January 31, 2019 on the completion of the five-year review of the GE Program, CAB shared a summary of the recommendations of the External Reviewer, Vice Provost Grassian, and Provost Larson who stated that the GE Program should "establish a policy to discourage double-counting courses with other programs."

CAB reviewed course proposals to avoid duplicating the curricula of existing programs, and conducted course usage reports for every course proposed for a

GE Minor, and in general recommended GE Minors to EPPC where students couldn't count half or more of the courses in the GE Minor for any other program (major or minor) on campus.

In the case of this minor, there is significant overlap with the existing and soon-to-be discontinued GE Minor in Science, Technology, and Values. Like the existing GE Minor, the proposed minor explores the complex and difficult issues raised by the rapid increase in scientific knowledge and new technologies; the social, cultural, and historical contexts of scientific research and technological innovation; and the impact of technological change on culture and what it means to be human. In response to feedback from faculty and students, CAB recommends a revised name of Science, Technology, and Society to better reflect the content of the minor, as well as adopt the internationally accepted name of this interdisciplinary curriculum.

GE Minors, by definition, are unique from any other curricula on campus: they connect a select set of lower- and upper-division GE courses to form an intellectually cohesive course of study that explores an issue or subject from multidisciplinary perspectives. They are distinct and should have a minimal impact on existing programs.

D. Student demand for the minor.

#### V. Resources

A. List the faculty members for the required courses in the minor by

Name

Rank

Appointment status

Highest degree earned

Date and Field of highest degree

Professional experience

B. List the faculty members for the elective courses in the minor by

Name

Rank

Appointment status

Highest degree earned

- C. List the resources needed to sustain the program for the first five years, including cost and funding source.
  - 1. Faculty
  - 2. Staff
  - 3. Facilities
  - 4. Library resources; provide evidence of consultation with the Library Dean indicating that the program can be supported by the library.
  - 5. Equipment
  - 6. Specialized material
- D. Additional support resources required, including source of support.

#### VI. Curriculum

Note: Proposed curriculum should take advantage of courses already offered in other departments when subject matter would otherwise overlap or duplicate existing course content.

- A. Total number of units required for the minor. 18
- B. List all new courses for the proposed program. No new courses.
  - 1. Course number and title

Units of credit

Prerequisites

Proposed catalog description

Mode of course delivery if other than regular

- 2. Identify the new courses needed to initiate the program.
- 3. Identify the new courses needed during the first two years after implementation.
- C. List all required courses for the minor.

Course number and title

Units of credit

Prerequisites

D. List all elective courses for the minor.

Course number and title

Units of credit

#### Curriculum Summary, as Requested by EPPC:

#### 3 Lower-Division Courses, Choose 3 from Different GE Areas:

B2

• ANTH 111: Introduction to Biological Anthropology

C1

- MADT 217: Social Media Photography (Fa)
- MADT 218: Social Media Storytelling (Sp)

C2

- PHIL 133: Philosophy and Video Games
- TECH 182: Science Fiction

D

• TECH 180 Invention and Innovation

E

• CSCI 102: Living with Technology

#### **3 Upper-Division Courses:**

UD-B

• BIOL 302W: Evolution

UD-C

• ENGL 350W: Science, Technology, and the Literature of Cultural Change USD

UD-D

• RELS/SOCI 341: Science, Technology, and Religion GC

Note: Chairs and Deans have indicated preliminary support for these courses, including any changes to existing courses. However, in consultation with the Academic Senate and Curriculum Services, CAB will not request Intent Memos and/or CPCRs until after the completion of the senate process. Chair/Dean support, therefore, are not formal "approvals," but rather indications of possible support during normal curriculum processes (Intent Memo and CPCR) that will likely take place in August 2020.

- E. Explain provisions for articulation of the proposed minor with community college courses.
- F. Complete catalog copy, including admission and completion requirements. See the current University Catalog for correct format; please follow it exactly. Before the proposal is submitted to Curriculum Services, it may be helpful to review catalog copy with Academic Publications.

Note 1: The catalog copy represents changes to existing courses approved by CAB but pending normal curriculum process (Intent Memos and/or CPCRs) after the completion of the senate process, as recommended by Curriculum Services and the Academic Senate.

Note 2: The catalog copy includes new prerequisites for upper-division GE courses, which will be added to all upper-division GE courses (whether in GE Minors or not) for Fall 2021 implementation. The new prerequisites are our campus response to EM 19-021's mandate that "CAB will work with relevant units to transition our practices to support EO 1100, sec 2.2.3." Here's EO 1100, sec. 2.2.3

The 9 upper-division GE courses are designed to be taken after upper-division status (completion of 60 semester units or 90 quarter units) is attained. Students enrolling in upper-division GE courses shall have completed required lower-division GE courses in written communication, oral communication, critical thinking, and mathematics/quantitative reasoning. Campuses may require no more than 9 upper-division GE semester units (or the quarter equivalent).

After working with relevant units on campus, CAB recommends adding a prerequisite <u>statement</u> to all UD GE courses (for Fall 2021 catalog), but not adding the prerequisite to PeopleSoft, etc. Here is the prerequisite language that we will add to all UD GE courses, beginning with the Fall 2021 catalog (the same as San Francisco State's):

Prerequisites: GE Areas A1, A2, A3, and B4 or consent of the instructor.

## In Fall 2021, Chico State's A4 will be renamed as B4 to align with EO 1100.

Attach the New Minor signature form to the front of the proposal and submit to Curriculum Services after all department and college reviews are complete.

# The General Education Minor in Science, Technology, and Society

# **Course Requirements for the Minor: 18 units**

The following courses, or their approved transfer equivalents, are required of all candidates for this minor.

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2	courses	Se	lected	from:
	courses	30	iccicu	II VIII.

Choose 3 courses, each from a different GE area.

1:5-	Science	/D2\
I ITA	SCIENCE	$I \bowtie J $
		( 0 2 )

Life Science	$\mathcal{E}(DZ)$			
ANTH 111	Introduction to Biological Anthropology	3.0	FS	GE
Arts (C1)				
MADT 217	Social Media Photography	3.0	FA	GE
MADT 218	Social Media Storytelling	3.0	SP	GE
Humanities	(C2)			
PHIL 133	Philosophy and Video Games	3.0	FS	GE
TECH 182	Science Fiction	3.0	FS	GE
Social Scien	nces (D)			
TECH 180	Invention and Innovation	3.0	FS	GE
Lifelong Lea	arning (E)			
CSCI 102	Living With Technology	3.0	FS	GE

# **Upper Division: 9 units**

### 3 courses required:

Choose 1 course from each different GE area.

## Scientific Inquiry and Quantitative Reasoning (B)

BIOL 302 Evolution 3.0 FS GE

Prerequisites: One biological sciences course, and GE Areas A1, A2, A3, and B4 or consent of the instructor.

BIOL 302W Evolution (W) 3.0 FS GE W

Prerequisites: One biological sciences course, and GE Areas A1, A2, A3, and B4 or consent of the instructor.

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Arts	ana	Humanities (	)

ENGL 350W Science, Technology, and the Literature of Cultural 3.0 FS GE USD W Change (W)

Prerequisites: GE Areas A1, A2, A3, and B4 or consent of the instructor.

## Social Sciences (D)

**SOCI 341** 

RELS 341 Science, Technology, and Religion 3.0 FS GE GC

3.0

FS

GE GC

Prerequisites: GE Areas A1, A2, A3, and B4 or consent of the instructor.

Science, Technology, and Religion

This course is also offered as SOCI 341.

Prerequisites: GE Areas A1, A2, A3, and B4 or consent of the instructor.

This course is also offered as RELS 341.