

# CLAS Committee on Curricula and Courses

Chair: Steve Stifano

Minutes: October 4th, 2022

Meeting Details: 3:30-5:00 PM on WebEx: <https://uconn-cmr.webex.com/meet/scs06002>

## I. Approvals by the Chair:

<i>Agenda Item</i>	<i>Form</i>	<i>Action (Syllabus or Relevant Form is linked)</i>
2223-018	<a href="#">1148C</a>	<b>Add Special Topic:</b> KORE 3295: <a href="#">STARTALK</a> Korean Culture & Language Immersion
2223-010		<b>Digital Public History</b> Revise Recently-Approved <a href="#">Minor</a>
2223-020	<a href="#">1188C</a>	<b>Add Special Topic:</b> MCB 3895: <a href="#">Molecular Biology of the Eukaryotic Genome</a>
2223-027	<a href="#">1208C</a>	<b>Add Special Topic:</b> PHYS 4095: <a href="#">Quantum Computation and Quantum Information</a>

## II. Approved Proposals

<i>Agenda Item</i>	<i>CAR</i>	<i>Program or Course</i>	<i>Action (Syllabus or Relevant Form is linked)</i>
<a href="#">2223-017</a>	<a href="#">12727</a>	<b>MATH 3180</b>	Add <a href="#">Course</a> (Guest: Jeremy Teitelbaum)
<a href="#">2223-021</a>	<a href="#">13365</a>	<b>SOCI 2655</b>	Add <a href="#">Course</a> (G)(S)
<a href="#">2223-015</a>		<b>HDFS</b>	Revise <a href="#">Major</a>
<a href="#">2223-016</a>		<b>Culture, Health, &amp; HumDev</b>	Add <a href="#">Minor</a> (Guest: Charlie Super)
<a href="#">2223-019</a>	<a href="#">12825</a>	<b>ECON 3317</b>	Add <a href="#">Course</a>
<a href="#">2223-027</a>	<a href="#">14605</a>	<b>ECON 3318</b>	Add <a href="#">Course</a>
<a href="#">2223-022</a>	<a href="#">14606</a>	<b>JOUR 4065</b>	Revise <a href="#">Course</a>
<a href="#">2223-023</a>	<a href="#">14725</a>	<b>JOUR 2065</b>	Revise <a href="#">Course</a> (S)
<a href="#">2223-024</a>	<a href="#">13665</a>	<b>JOUR 3030</b>	Revise <a href="#">Course</a>
<a href="#">2223-025</a>	<a href="#">14706</a>	<b>JOUR 3000W</b>	Revise <a href="#">Course</a> (G)(S)
<a href="#">2223-026</a>	<a href="#">11265</a>	<b>PHIL 5484</b>	Add <a href="#">Course</a>
<a href="#">2223-029</a>	<a href="#">14305</a>	<b>PHIL 3202</b>	Add <a href="#">Course</a>
<a href="#">2223-028</a>	<a href="#">14765</a>	<b>PHYS 1201</b>	Revise <a href="#">Course</a> (G)(S)
<a href="#">2223-031</a>	<a href="#">13685</a>	<b>ENGL 2600</b>	Revise <a href="#">Course</a> (S)
<a href="#">2223-032</a>	<a href="#">14985</a>	<b>GEOG 2510</b>	Drop Course (S)
<a href="#">2223-033</a>		<b>GIS</b>	Revise <a href="#">Major</a>
<a href="#">2223-035</a>	<a href="#">14905</a>	<b>ERTH 6000</b>	Add <a href="#">Course</a>

Approved Copy

MATH 3180: Mathematics for Machine Learning  
 Credits: 3.00  
 Prerequisites: MATH 2110Q and 2210Q  
 Recommended preparation: MATH 3160  
 Grading Basis: Graded

Applications of elementary linear algebra, probability theory, and multivariate calculus to fundamental algorithms in machine learning. Topics include the theory of orthogonal projection, bilinear forms, and the spectral theorem to multivariate regression and principal component analysis; optimization algorithms such as gradient descent and Newton's method applied to logistic regression; and convex geometry applied to support vector machines. Other topics include Bayesian probability theory and the theory of convolution especially as applied to neural networks. Theory illustrated with computer laboratory exercises.

[\[return to top\]](#)

Approved Copy

SOCI 2655. Sociology of Carework  
 3.00 credits  
 Prerequisites: none  
 Grading Basis: Graded

Organization of carework, both nurturing and social reproduction, including activities essential for daily living; meanings and complexity of carework in varied contexts, for diverse populations, and through different working conditions; alternative ways of organizing carework infrastructure.

SOCI 2655W. Sociology of Carework  
 3.00 credits  
 Prerequisites: ENGL 1007 or 1010 or 1011 or 2011  
 Grading Basis: Graded

[\[return to top\]](#)

Existing Copy

Course descriptions

Students in the Human Development and Family Sciences major must complete the following requirements: HDFS 1070; PSYC 1100, 1103 (or 1101); SOCI 1001 or HDFS 1060; and STAT 1000Q or 1100Q (Note: These courses may also fulfill University General Education

Approved Revisions, Changes Highlighted

Course descriptions

Students in the Human Development and Family Sciences major must complete the following requirements: HDFS 1070; PSYC 1100, 1103 (or 1101); **SOCI 1001** or HDFS 1060; and STAT 1000Q or 1100Q (Note: These courses may also fulfill University General Education

requirements). Students must meet the information literacy and writing competency requirements through satisfactory completion of HDFS 2004W and one of the following: HDFS 4007W, 4087W, or 4181W.

The major in Human Development and Family Sciences requires 43 credits at the 2000 level or above including 31 credits in Human Development and Family Sciences and 12 credits in courses related to but outside the major department. A student completing requirements for a major must have a grade point average of 2.0 or better in the credits that count toward the major in Human Development and Family Sciences. Students are allowed much flexibility in tailoring their major to meet their particular interests and educational goals. Working with their advisors and other faculty, students can develop their HDFS plan of study to reflect inter-related areas of expertise in areas such as Early Childhood Education, Child and Adolescent Development; Adulthood, Aging, and Gerontology; Couples, Parents, and Families; Health, Wellbeing, and Prevention; and Diversity and Culture.

This major must include all of the following required courses: HDFS 2001, 2004W, 2100, 2200, and 2300.

This major must include the completion of one of the following courses: HDFS 3520, 3530, 3540, or 3550.

This major must include completion of one of the following courses as a second W: HDFS 4007W, 4087W, or 4181W.

This major also must include at least nine credits from the following courses: HDFS 2142E, 3042, 3083\*, 3092\*\*, 3095, 3098, 3101, 3102, 3103, 3110, 3120, 3122, 3123, 3125, 3127, 3141, 3240, 3249, 3250, 3251, 3252, 3261, 3268, 3277, 3310, 3311, 3319, 3340, 3341, 3342, 3343, 3420, 3421, 3423, 3425, 3430, 3431, 3432, 3433, 3442, 3473, 3510, 3520, 3530, 3540, 3550, 4004, 4007W, and 4255.

requirements). Students must meet the information literacy and writing competency requirements through satisfactory completion of HDFS 2004W and one of the following: HDFS 4007W, 4087W, or 4181W.

The major in Human Development and Family Sciences requires 43 credits at the 2000 level or above including 31 credits in Human Development and Family Sciences and 12 credits in courses related to but outside the major department. A student completing requirements for a major must have a grade point average of 2.0 or better in the credits that count toward the major in Human Development and Family Sciences. Students are allowed much flexibility in tailoring their major to meet their particular interests and educational goals. Working with their advisors and other faculty, students can develop their HDFS plan of study to reflect inter-related areas of expertise in areas such as Early Childhood Education, Child and Adolescent Development; Adulthood, Aging, and Gerontology; Couples, Parents, and Families; Health, Wellbeing, and Prevention; and Diversity and Culture.

This major must include all of the following required courses: HDFS 2001, 2004W, 2100, 2200, and 2300.

This major must include the completion of one of the following courses: HDFS 3520, 3530, 3540, or 3550.

This major must include completion of one of the following courses as a second W: HDFS 4007W, 4087W, or 4181W.

This major also must include at least nine credits from the following courses: HDFS 2095, 2142E, 2620, 3042, 3083\*, 3092\*\*, 3095, 3098, 3101, 3102, 3103, 3110, 3120, 3122, 3123, 3125, 3127, 3141, 3240, 3249, 3250, 3251, 3252, 3261, 3268, 3277, 3310, 3311, 3319, 3340, 3341, 3342, 3343, 3420, 3421, 3423, 3425, 3430, 3431, 3432, 3433, 3442, 3473, 3510, 3520, 3530, 3540, 3550, 4004, 4007W, and 4255.

These nine credits may include elections from HDFS 3520, 3530, 3540, 3550, or 4007W if not applied to satisfaction of the foregoing requirements.

\* No more than six credits can be counted toward the nine selected credits.

\*\* No more than three credits can be counted toward the nine selected credits.

### Minors

Minors in Gerontology and Human Development and Family Sciences are offered. Please refer to their descriptions in the Minors section of this Catalog.

### Honors Program

The Human Development and Family Sciences Honors Program offers motivated students a way of enhancing their studies while providing distinction to their academic records through more in-depth study and the opportunity for independent projects or research. Human Development and Family Sciences majors with an overall GPA of 3.2 or higher and a GPA in the major of 3.5 or higher are eligible to apply to the Honors Program in Human Development and Family Sciences. Students should apply as early as possible, and applications will not be accepted after the first semester of a student's junior year. Honors Scholars who complete the required honors course work and an approved honors thesis project, as well as maintain the required GPA, will graduate with a degree with Honors. For more information on this program, contact the Human Development and Family Sciences Honors Advisor.

These nine credits may include elections from HDFS 3520, 3530, 3540, 3550, or 4007W if not applied to satisfaction of the foregoing requirements.

\* No more than six credits can be counted toward the nine selected credits.

\*\* No more than three credits can be counted toward the nine selected credits.

### Minors

Minors in Gerontology, Culture Health and Human Development, and Human Development and Family Sciences are offered. Please refer to their descriptions in the Minors section of this Catalog.

### Honors Program

The Human Development and Family Sciences Honors Program offers motivated students a way of enhancing their studies while providing distinction to their academic records through more in-depth study and the opportunity for independent projects or research. Human Development and Family Sciences majors with an overall GPA of 3.2 or higher and a GPA in the major of 3.5 or higher are eligible to apply to the Honors Program in Human Development and Family Sciences. Students should apply as early as possible, and applications will not be accepted after the first semester of a student's junior year. Honors Scholars who complete the required honors course work and an approved honors thesis project, as well as maintain the required GPA, will graduate with a degree with Honors. For more information on this program, contact the Human Development and Family Sciences Honors Advisor.

[\[return to top\]](#)

The minor in Culture, Health, and Human Development (CHHD) is an interdisciplinary minor that fosters an integrative cultural perspective on human development and health, including issues related to diversity both within and across various populations. By providing students an opportunity to explore systematic relationships among culture, health, and human development, the minor can address gaps between the traditional disciplines. It is intended to improve understanding and respect across perceived cultural, racial, and ethnic boundaries, and to encourage culturally informed approaches in the social and health services.

Fifteen credits (primarily at the 2000-level or above) are required for the CHHD minor, to be chosen from the courses listed below. No more than six credits can be applied from any one category: culture, health, or human development. Further, students can count toward this minor no more than six credits in their major. Other credit restrictions may apply by major.

The CHHD minor is organized by the [Center for the Study of Culture, Health, and Human Development](#), and managed by the [Department of Human Development and Family Sciences](#).

*Category 1: Culture*

AAAS 2200, AAAS 2201, AAAS 2210, AFRA 2250, AFRA 3501, AH 2330, AH 4501, AH 4503, ANTH 1000, ANTH 3202W, ANTH 3251, ANTH 3300, ANTH 3325, ARAB 1171, CHIN 1122, COMM 3220, COMM 3222, COMM 3321, COMM 3322, COMM 4411, FREN 1176, FREN 3210, GERM 3251, HDFS 2001, HDFS 3141, HDFS 3310, HDFS 3421, HDFS 3442, HDFS 3473, HDFS 3550, HDFS 5020, ILCS 1170, LLAS 1009, LLAS 3264, LLAS 3250, LLAS 3322, LLAS 3470, NURS 2175, NUSC 1167, NUSC 3230, PSYC 2101, PSYC 2701, SLHS 4123, SLHS 4254, SPAN 1009, SPAN 3204, WGSS 2124, WGSS 2263, WGSS 3105, WGSS 3257, WGSS 3260.

*Category 2: Health*

AFRA 2250, AH 2330, AH 4501, AH 4503, ANTH 3202W, ANTH 3300, ANTH 3325, HDFS 3442, HDFS 5020, LLAS 3250, NURS 2175, NUSC 1167, NUSC 2200, NUSC 3230, SLHS 4123, SLHS 4254, WGSS 2124, WGSS 2263, WGSS 3105, WGSS 3257.

*Category 3: Human Development*

HDFS 2001, HDFS 3141, HDFS 3310, HDFS 3421, HDFS 5020, NUSC 2200, SLHS 4123, SLHS 4254.

[\[return to top\]](#)

**2223-019**     [12825](#)     **ECON 3317**

**Add [Course](#)**

Approved Copy

3317. Machine Learning for Economists

3.00 credits

Prerequisites: ECON 2311Q, 2312Q, and 3321. Not open for credit to students who have passed ECON 5317.

Grading Basis: Graded

Machine learning techniques and causal inference. Applications to economic data.

[\[return to top\]](#)

**2223-027**     [14605](#)     **ECON 3318**

**Add [Course](#)**

Approved Copy
<p>3318. Panel Data Econometrics.            3.00 Credits.            Prerequisites: Econ 2311Q, Econ 2312Q and ECON 3321. Not open for credit to students who have passed ECON 5318.            Grading Basis: Graded.</p> <p>Standard panel data models with an emphasis on determining when causal relationships can be inferred from panel data.</p>

[\[return to top\]](#)

**2223-022    [14606](#) JOUR 4065    **Revise Course****

Existing Copy	Approved Revisions, Changes Highlighted
<p>4065 Advanced Visual Journalism            3.00 credits            Prerequisites: JOUR 3065; open to juniors or higher.            Grading Basis: Graded</p> <p>Explores multimedia storytelling through time-based media from a journalistic perspective. Students will develop multimedia narrative skills using photography, videography, and audio to create new media content.</p>	<p>4065 Video Storytelling            3.00 credits            Prerequisites: <b>None. Recommended Preparation: JOUR 2065 and 3065.</b>            Grading Basis: Graded</p> <p><b>Explores journalistic storytelling techniques through video. Students will learn how to gather video and audio content and develop production and post-production techniques to create and publish extended narrative multimedia projects.</b></p>

[\[return to top\]](#)

**2223-023    [14725](#) JOUR 2065    **Revise Course (S)****

Existing Copy	Approved Revisions, Changes Highlighted
<p>2065. Mobile Storytelling            3.00 credits            Prerequisites: JOUR 1002, which may be taken concurrently; open to sophomores or higher.            Grading Basis: Graded</p> <p>Entry-level photojournalism course that develops aesthetic and technical skills for storytelling using mobile equipment such as smartphones.</p>	<p>2065. Mobile Storytelling            3.00 credits            Prerequisites: <b>None. Recommended Preparation: JOUR 1002.</b>            Grading Basis: Graded</p> <p>Entry-level photojournalism course that develops aesthetic and technical skills for storytelling using mobile equipment such as smartphones.</p>

[\[return to top\]](#)

**2223-024    [13665](#) JOUR 3030    **Revise Course****

Existing Copy	Approved Revisions, Changes Highlighted

<p>3030. The Editor's Craft 3.00 credits Prerequisites: JOUR 2000W. Recommended preparation: JOUR 2001W. Grading Basis: Graded</p> <p>News value; information verification; editing for grammar, spelling, punctuation, and style; content editing; headline writing; search engine optimization; handling visuals; building data visualizations; basic layout and design for print and digital platforms.</p>	<p>3030. <b>Multiplatform Editing</b> 3.00 credits Prerequisites: JOUR 2000W. Recommended preparation: JOUR 2001W. Grading Basis: Graded</p> <p><b>News value; information verification; editing for grammar, spelling, punctuation and style; headline writing; search engine optimization; handling visuals; building basic data visualizations; basic layout and design for print and digital platforms; aggregation; interactive news story production; audience engagement and social media.</b></p>
--	---

[\[return to top\]](#)

**2223-025    [14706](#)    JOUR 3000W**

**Revise [Course \(G\)\(S\)](#)**

Existing Copy	Approved Revisions, Changes Highlighted
<p>3000W. Public Affairs Reporting 3.00 credits Prerequisites: JOUR 2001W; ENGL 1007 or 1010 or 1011 or 2011; <b>open to juniors or higher.</b> Grading Basis: Graded</p> <p>In-depth reporting on state and local government-municipal agencies, boards, commissions, courts, public safety, schools. Field Trips required.</p>	<p>3000W. <b>Community News Reporting</b> 3.00 credits Prerequisites: JOUR 2001W; ENGL 1007 or 1010 or 1011 or 2011 Grading Basis: Graded</p> <p><b>In-depth reporting across platforms on local and state issues and events, including government, politics, schools, public safety and a diverse base of community organizations and groups.</b></p>

[\[return to top\]](#)

**2223-026    [11265](#)    PHIL 5484**

**Add [Course](#)**

Approved Copy
<p>PHIL 5484: Proposal, Prospectus, and Dissertation Writing Seminar. <b>2.00-3.00 Credits. Repeatable for credit up to a maximum of 12 credits.</b> Prerequisites: Open to graduate students in Philosophy; others by instructor consent. Grading basis: Graded</p> <p>Philosophy students will write and circulate drafts and get feedback on their proposal, prospectus, or dissertation, and practice the presentation of their work. Students working on philosophical theory outside the department are also welcome.</p>

[\[return to top\]](#)

**2223-029    [14305](#)    PHIL 3202**

**Add [Course](#)**

Approved Copy
---------------

3202. Data Ethics

3.00 credits

Prerequisites: One three-credit course in Philosophy at the 1100 level.

Grading Basis: Graded

Ethical and epistemological questions encountered in collecting, interpreting, inferring from and acting upon data—including when these activities are automated or carried out on large observational data sets. Issues may include data privacy and ownership; informed consent; algorithmic bias, equity, and transparency; the theory-ladenness of data; the logic of scientific inference; corporate and institutional responsibility; and implications for democratic and other social values.

[\[return to top\]](#)

2223-028 [14765](#) PHYS 1201

Revise [Course \(G\)\(S\)](#)

Existing Copy	Approved Revisions, Changes Highlighted
<p>PHYS 1201Q. General Physics I 4.00 credits Prerequisites: MATH 1060Q or 1110Q or 1120Q or 1125Q or equivalent. Not open for credit to students who have passed PHYS 1401Q, 1501Q, or 1601Q. May not be taken out of sequence after passing PHYS 1202Q. Grading Basis: Graded</p> <p>A non-calculus based course introducing the laws of force and motion applied to mechanical phenomena. Concepts such as work, mechanical energy, linear and angular momentum, and energy conservation are explained. The laboratory offers fundamental training in precise measurements. CA 3-LAB.</p>	<p>PHYS 1201Q. General Physics I 4.00 Credits Prerequisites: <b>MATH 1060Q or Math Placement Score of 22 or equivalent.</b> Not open for credit to students who have passed PHYS 1401Q, 1501Q, or 1601Q. May not be taken out of sequence after passing PHYS 1202Q. Grading Basis: Graded</p> <p>A non-calculus based course introducing the laws of force and motion applied to mechanical phenomena. Concepts such as work, mechanical energy, linear and angular momentum, and energy conservation are explained. The laboratory offers fundamental training in precise measurements. CA 3-LAB.</p>

[\[return to top\]](#)

2223-031 [13685](#) ENGL 2600

Revise [Course \(S\)](#)

Existing Copy	Approved Revisions, Changes Highlighted
<p>2600. Introduction to Literary Studies 3.00 credits Prerequisites: ENGL 1007 or 1010 or 1011 or 2011; open to English majors, others with instructor consent. Grading Basis: Graded</p> <p>Skills essential for the successful pursuit of a degree in English: textual analysis (close reading of poetry and prose), literary criticism and theory, research and citation methods, and critical writing</p>	<p>2600. Introduction to Literary Studies 3.00 credits Prerequisites: <b>none</b> Grading Basis: Graded</p> <p>Skills essential for the successful pursuit of a degree in English: textual analysis (close reading of poetry and prose), literary criticism and theory, research and citation methods, and critical writing</p>



about literature.	about literature.
-------------------	-------------------

[\[return to top\]](#)

**2223-032**     [14985](#)     **GEOG 2510**     **Drop Course (S)**

Catalog Copy
--------------

<p>2510. Visualizing Geographic Data  3.00 credits  Prerequisites: None.  Grading Basis: Graded</p> <p>Survey of methods for representing geographic data in tables, graphs, and maps emphasizing proper application, integration, and interpretation of methods in data visualization.</p>
---

[\[return to top\]](#)

**2223-033**     **GIS**     **Revise [Major](#)**

Existing Copy	Approved Revisions, Changes Highlighted
---------------	---

<p><b>Bachelor of Science or Bachelor of Arts</b></p> <p>Students can obtain a B.S. or B.A. degree. The GIScience B.A. degree does not require students to take biology, chemistry, physics, or calculus, and focuses on classes related to spatial analysis of social issues. The GIScience B.S. degree requires students to take biology, chemistry, physics and calculus and is intended as preparation for students pursuing a career in natural science or engineering with geospatial technology.</p> <p><b>Major Requirements</b></p> <p>The major in GIScience requires at least <b>26</b> credits of 2000-level or higher courses in the Department of Geography. GIScience majors complete basic core courses before beginning advanced courses. Recommended preparation for the major: GEOG 1302 and 1010.</p> <p><u>Required Core Courses (at least <b>14</b> credits)</u></p> <p>GEOG 2500, 2505, 3510 or 3500Q, 3530, and any GEOG W course at the 2000 level or above (one or three credits).</p>	<p><b>Bachelor of Science or Bachelor of Arts</b></p> <p>Students can obtain a B.S. or B.A. degree. The GIScience B.A. degree does not require students to take biology, chemistry, physics, or calculus, and focuses on classes related to spatial analysis of social issues. The GIScience B.S. degree requires students to take biology, chemistry, physics and calculus and is intended as preparation for students pursuing a career in natural science or engineering with geospatial technology.</p> <p><b>Major Requirements</b></p> <p>The major in GIScience requires at least <b>26</b> credits of 2000-level or higher courses in the Department of Geography. GIScience majors complete basic core courses before beginning advanced courses. Recommended preparation for the major: GEOG 1302 and 1010.</p> <p><u>Required Core Courses (at least <b>14</b> credits)</u></p> <p>GEOG 2500, 2505, 3510 or 3500Q, 3530, and any GEOG W course at the 2000 level or above (one or three credits).</p>
--	--

### Electives (12 credits)

In addition to the required courses above, the plan of study must include **12** credits of electives from courses below. At least **six** credits of electives must be selected from the list of GIScience courses. At least **six** credits of electives must be selected from the list of Human Geography or Physical Geography courses. At least **three** credits must be 4000-level. No more than six credits of internship and/or independent study (GEOG 4090, 4091, and 4099) may be counted toward the additional credit requirements of the Geographic Information Sciences major.

#### *GIScience Courses:*

GEOG 2510, 3110, 3500Q\*, 3505, 3510\*, 3512, 4130, 4230, 4515, 4516, 4518, 4519.

*\* if it's not chosen as a core course*

#### *Human and Physical Geography Courses:*

GEOG 2000, 2100, 2200, 2300E, 2310, 2320, 2400, 3000, 3200, 3310, 3400, 3410, 3420, 4210, 4220, 4240, 4300.

### Related Courses (12 credits)

12 credits of related coursework taken in other departments. At least three credits of related courses must be selected from the list of Remote Sensing courses. The following is a list of pre-approved related courses that may be relevant to the GIScience major. Other courses can be used with approval of a student's Geography advisor.

#### *Remote Sensing Courses:*

NRE 2000, 3535, 4535, 4545, 4575.

#### *Computer Science and Engineering Courses:*

CSE 2050, 2100, 2102, 2300, 2304, 2500, 3000, 3100, 3150; 3300, 3400, 3500; CE 2251, 2310E, 2410, 2710.

#### *Math and Statistics Courses:*

MATH 2110Q, 2130Q, 2143, 2144, 2210Q, 2410Q, 2420Q, 3160, 3410, 3435, 3710; STAT 2215Q, 3025Q, 3115Q, 3375Q, 3445, 3515Q.

#### *Social Science Courses:*

ANTH 2510, 3003, 3090, 3503, 3512, 3513, 3514, 3515; INTD 3584, 3594; POLS 2062, 2072Q; SOCI 3201, 3211Q; URBN 2000, 2100, 2301Q,

### Electives (12 credits)

In addition to the required courses above, the plan of study must include **12** credits of electives from courses below. At least **six** credits of electives must be selected from the list of GIScience courses. At least **six** credits of electives must be selected from the list of Human Geography or Physical Geography courses. At least **three** credits must be 4000-level. No more than six credits of internship and/or independent study (GEOG 4090, 4091, and 4099) may be counted toward the additional credit requirements of the Geographic Information Sciences major.

#### *GIScience Courses:*

GEOG 2510, 3110, 3500Q\*, 3505, 3510\*, 3512, 4130, 4230, 4515, 4516, 4518, 4519.

*\* if it's not chosen as a core course*

#### *Human and Physical Geography Courses:*

GEOG 2000, 2100, 2200, 2300E, 2310, 2320, 2400, 3000, 3200, 3310, 3400, 3410, 3420, 4210, 4220, 4240, 4300.

### Related Courses (12 credits)

12 credits of related coursework taken in other departments. ~~At least three credits of related courses must be selected from the list of Remote Sensing courses.~~ The following is a list of pre-approved related courses that may be relevant to the GIScience major. Other courses can be used with approval of a student's Geography advisor.

#### *Remote Sensing Courses:*

NRE 2000, 3535, 4535, 4545, 4575.

#### *Computer Science and Engineering Courses:*

CSE 2050, 2100, 2102, 2300, 2304, 2500, 3000, 3100, 3150; 3300, 3400, 3500; CE 2251, 2310E, 2410, 2710.

#### *Math and Statistics Courses:*

MATH 2110Q, 2130Q, 2143, 2144, 2210Q, 2410Q, 2420Q, 3160, 3410, 3435, 3710; STAT 2215Q, 3025Q, 3115Q, 3375Q, 3445, 3515Q.

#### *Social Science Courses:*

ANTH 2510, 3003, 3090, 3503, 3512, 3513, 3514, 3515; INTD 3584, 3594; POLS 2062, 2072Q; SOCI 3201, 3211Q; URBN 2000, 2100, 2301Q,

<p>2302, 2400, 3210, 3993, 3981/3991, 3998;          COMM 2000Q, 2110, 2300, 2700; WGSS 2124,          2255, 2255W, 3255, 3255W, 3269.</p> <p><i>Natural Science Courses:</i>          EARTH 2500, 3230, 4050W, 4210, 4735; EEB          4100, 4230W; MARN 2060, 3000E, 3014, 3030,          3812.</p> <p><i>Economics Courses:</i>          ECON 2201, 2202, 2211Q, 2212Q, 2301, 2311,          2312Q, 2326, 2327, 3103, 3313, 3421, 3439.</p> <p>The Information Literacy Competency and          Writing in the Major requirements can be satisfied          by passing any 2000 or higher-level W course in          Geography.</p>	<p>2302, 2400, 3210, 3993, 3981/3991, 3998;          COMM 2000Q, 2110, 2300, 2700; WGSS 2124,          2255, 2255W, 3255, 3255W, 3269.</p> <p><i>Natural Science Courses:</i>          EARTH 2500, 3230, 4050W, 4210, 4735; EEB          4100, 4230W; MARN 2060, 3000E, 3014, 3030,          3812.</p> <p><i>Economics Courses:</i>          ECON 2201, 2202, 2211Q, 2212Q, 2301, 2311,          2312Q, 2326, 2327, 3103, 3313, 3421, 3439.</p> <p>The Information Literacy Competency and          Writing in the Major requirements can be          satisfied by passing any 2000 or higher-level W          course in Geography.</p>
---	---

[\[return to top\]](#)

**2223-035**    [14905](#)    **ERTH 6000**                      **Add [Course](#)**

<p>Approved Copy</p> <p>6000. Seminar in Earth Sciences          1-3.00 credits   May be repeated for a total of 6 credits.          Prerequisites: None.          Grading Basis: Graded</p> <p>Weekly meetings focused on recent advances in Earth Sciences, including departmental seminars and/or          discussions of scientific literature.</p>
---

[\[return to top\]](#)

**Attendance (name in bold)**

**DEPARTMENT**

AAAS  
AFRA  
AMST  
ANTH  
CHEM  
CLAS DEAN'S OFFICE  
CLAS DEAN'S OFFICE  
CLAS DEAN'S OFFICE  
COMM  
ECON  
EEB  
ENGL  
ENVS/EVST  
EVST/GEOG  
GSCI  
HDFS  
HIST  
HRTS  
JOUR  
LING  
LCL  
LLAS  
MAST  
MATH  
MARN  
MCB  
PHIL  
PHYS  
PNB  
POLS  
PSYC  
PUBL  
SOCI  
SLHS  
STAT  
WGSS

**REPRESENTATIVE**

**Nu-Anh Tran**  
**Shawn Salvant**  
**Matt McKenzie**  
Dimitris Xygalatas  
**Fatma Selampinar**  
**Mansour Ndiaye**  
**Rebecca Bacher**  
**Lyn Tribble**  
**Anne Oeldorf-Hirsch**  
**Richard Langlois**  
**Paul Lewis**  
**Wayne Franklin**  
Jason Vokoun  
**Debs Ghosh**  
**Michael Hren**  
**Beth Russell**  
**Matt McKenzie**  
**Elizabeth Holzer**  
Marie Shanahan, **Julie Serkosky**  
**Jon Gajewski**  
**Sara Johnson**  
**Anne Gebelein**  
**Mary K Bercaw Edwards**  
**Guojun Gan**  
Heidi Dierssen  
James Cole (proxy **Elizabeth Kline**)  
**Lionel Shapiro**  
**Vernon Cormier**  
John Redden  
**Evan Perkoski**  
**Rob Henning**  
**Jennifer Dineen**  
**Ralph McNeal**  
**Lendra Friesen**  
**Victor Hugo Lachos**, Neil Spencer  
**Ariana Codr**