A MEMORANDUM

DATE: February 7, 2022

TO: Academic Deans Council

FROM: Dr. Andy Perkins
UCCC Chair

RE: Change Notice 8

Listed below are curriculum change proposals which have been recommended by the University Committee Courses and Curricula. Under current procedure, members of the Academic Deans Council may question the approval of these proposals at any time prior to 5:00 p.m. on February 18, 2022 by contacting Dr. Andy Perkins (5-0004) or the office of the Vice President for Academic Affairs (5-3742). If no questions have been raised, the proposals will be considered approved automatically.

1. Course Proposals by college/school

ARTS AND SCIENCES

Technical Change GR 8123	**Approved**	**FROM: GR 8123 Meteorology II: Forecasting and Storms.** (3). (Prerequisite: GR 6113 or consent of instructor). Three hours lecture, video and online. Continuation of Meteorology I. Emphasis on the forecasting of daily weather events and on severe weather. Primarily for K-12 science teachers. **TO: GR 8123 Meteorology II: Forecasting and Storms.** (3). (Prerequisite: GR 6113). Three hours lecture, video and online. Continuation of Meteorology I. Emphasis on the forecasting of daily weather events and on severe weather. Primarily for K-12 science teachers. Effective: Fall 2022
Technical Change GR 8133	**Approved**	**FROM: GR 8133 Foundations in Forecasting.** (3). (Prerequisite: GR 8123 or consent of instructor). Three hours lecture (online). Emphasis on daily weather forecasting at the synoptic and meso scales and introduction and investigation of advanced methods. **TO: GR 8133 Foundations in Forecasting.** (3). Three hours lecture (online). Emphasis on daily weather forecasting at the synoptic and meso scales and introduction and investigation of advanced methods. Effective: Fall 2022
Technical Change GR 8191	**Approved**	**FROM: GR 8191 Geoscience Review.** (1). (Prerequisites: 30 hours of GR/GG graduate work and consent of instructor.) One hour seminar. One hour seminar. Conduit for interactions with faculty members to assist students in preparing for comprehensive assessment in distance learning degree programs. **TO: GR 8191 Geoscience Review.** (1). (Prerequisites: 30 hours of GR/GG graduate work). One hour seminar. Conduit for interactions with faculty members to assist students in preparing for comprehensive assessment in distance learning degree programs. Effective: Fall 2022

Technical Change	GR 8303	**Approved**	**FROM: GR 8303 Advanced Geodatabase Systems.** (3). (Prerequisite: GR 4353/6353 or Consent of instructor.) Two hours lecture. Two hours laboratory. Examination of database structures utilized in geospatial information systems. Design and use of geospatial databases through spatial programming in development and implementation of spatial models. **TO: GR 8303 Advanced Geodatabase Systems.** (3). (Prerequisite: GR 4353/6353). Two hours lecture. Two hours laboratory. Examination of database structures utilized in geospatial information systems. Design and use of geospatial databases through spatial programming in development and implementation of spatial models. Effective: Fall 2022
Technical Change	GR 8333	**Approved**	**FROM: GR 8333 Field Techniques in Remote Sensing.** (3). (Prerequisite: Either GR 4333/6333, ECE 4423/6423 or FO 4452/6452 or consent of instructor). Two hours lecture and two hours laboratory. Field spectroscopy or proximal sensing; experimental design and data collection using in situ sensors; data analysis, model calibration, and validation for quantifying biophysical parameters. **TO: GR 8333 Field Techniques in Remote Sensing.** (3). (Prerequisite: Either GR 4333/6333, ECE 4423/6423 or FO 4452/6452). Two hours lecture and two hours laboratory. Field spectroscopy or proximal sensing; experimental design and data collection using in situ sensors; data analysis, model calibration, and validation for quantifying biophysical parameters. Effective: Fall 2022
Technical Change	GR 8400	**Approved**	**FROM: GR 8400 Field Methods in Geosciences.** (1-3). (Prerequisite: Consent of Instructor). Hours and credits to be arranged. May be taken twice. Provides field experience in the geosciences through planned and supervised outdoor projects and field trips. **TO: GR 8400 Field Methods in Geosciences.** (1-3). Hours and credits to be arranged. May be taken twice. Provides field experience in the geosciences through planned and supervised outdoor projects and field trips. Effective: Fall 2022

Technical Change	GR 8423	**Approved**	**FROM: GR 8423 Virtual Field Methods Seminar.** (3). (Prerequisite: Consent of instructor). Three hours seminar. Synthesis of geoscience sub-topics through collection and dissemination of local field data and through planned and supervised virtual field trip experiences. **TO: GR 8423 Virtual Field Methods Seminar.** (3). Three hours seminar. Synthesis of geoscience sub-topics through collection and dissemination of local field data and through planned and supervised virtual field trip experiences. Effective: Fall 2022
Technical Change	GR 8453	**Approved**	**FROM: GR 8453 Quantitative Analysis in Climatology.** (3). (Prerequisite: Consent of Instructor). Three hours lecture. Implementation of quantitative methods in climatology, including modeling, resampling methods and spatial techniques, emphasizing climate analysis software packages and data formats. **TO: GR 8453 Quantitative Analysis in Climatology.** (3). Three hours lecture. Implementation of quantitative methods in climatology, including modeling, resampling methods and spatial techniques, emphasizing climate analysis software packages and data formats. Effective: Fall 2022
Technical Change	GR 8553	**Approved**	**FROM: GR 8553 Research Methods in Geoscience.** (3). (Prerequisite: Consent of instructor). Three hours seminar and forum. Defining research problems, formulating hypotheses, collecting data, using analytical techniques, substantiating conclusions for geoscience topics; written and oral presentations of research projects required. **TO: GR 8553 Research Methods in Geoscience.** (3). Three hours seminar and forum. Defining research problems, formulating hypotheses, collecting data, using analytical techniques, substantiating conclusions for geoscience topics; written and oral presentations of research projects required. Effective: Fall 2022

Technical Change	GR 8563	**Approved**	**FROM: GR 8563 GIS Research Applications.** (3). (Prerequisite: GR 6333, GR 6313, ST 8114 or equivalent, or consent of instructor). Two hours lecture. Two hours laboratory. This course examines the research cycle from proposal to peer-reviewed publication via case studies in GIS with applications for medical epidemiology, wildfire, and emergency management. **TO: GR 8563 GIS Research Applications.** (3). (Prerequisite: GR 6333, GR 6313 or ST 8114). Two hours lecture. Two hours laboratory. This course examines the research cycle from proposal to peer-reviewed publication via case studies in GIS with applications for medical epidemiology, wildfire, and emergency management. Effective: Fall 2022
Technical Change	GR 8573	**Approved**	**FROM: GR 8573 Research in Applied Meteorology.** (3). (Prerequisite: Consent of Instructor). Seminar. Discussion and application of current research in applied meteorology. Individual or small group projects with research presentations. **TO: GR 8573 Research in Applied Meteorology.** (3). Seminar. Discussion and application of current research in applied meteorology. Individual or small group projects with research presentations. Effective: Fall 2022
Technical Change	GR 8583	**Approved**	**FROM: GR 8583 Environmental Geosciences Capstone Experience.** (3). (Prerequisite: GR 8553 or Consent of instructor). Three hours lecture. Application and synthesis of geosciences theory towards a directed research project. This course is the capstone experience for students in the MS in Environmental Geosciences Non-Thesis concentration. This course should be taken near the end of the program. **TO: GR 8583 Environmental Geosciences Capstone Experience.** (3). (Prerequisite: GR 8553). Three hours lecture. Application and synthesis of geosciences theory towards a directed research project. This course is the capstone experience for students in the MS in Environmental Geosciences Non-Thesis concentration. This course should be taken near the end of the program. Effective: Fall 2022

Technical Change	GR 8613	**Approved**	**FROM: GR 8613 Hydrometeorology.** (3). (Prerequisite: Consent of Instructor). Three hours lecture-video and online. Hydrometeorological principles with an emphasis on flood forecasting. **TO: GR 8613 Hydrometeorology.** (3). Three hours lecture-video and online. Hydrometeorological principles with an emphasis on flood forecasting. Effective: Fall 2022
Technical Change	GR 8633	**Approved**	**FROM: GR 8633 Climate Change.** (3). (Prerequisite: Consent of Instructor). Three hours lecture. In-depth examination of changes in earth's climate through time. Focus is placed on causes, measurement, implications and complexity of climate change. **TO: GR 8633 Climate Change.** (3). Three hours lecture. In-depth examination of changes in earth's climate through time. Focus is placed on causes, measurement, implications and complexity of climate change. Effective: Fall 2022
Technical Change	GR 8813	**Approved**	**FROM: GR 8813 Advanced Hazards and Disasters.** (3). (Prerequisite: Consent of Instructor). Three hours lecture. Advanced study of the processes, distribution and impacts of hazards and disasters. **TO: GR 8813 Advanced Hazards and Disasters.** (3). Three hours lecture. Advanced study of the processes, distribution and impacts of hazards and disasters. Effective: Fall 2022
Technical Change	GR 8833	**Approved**	**FROM: GR 8833 Weather and Society.** (3). (Prerequisite: Consent of Instructor). Three hours lecture. Study of the role of weather in and on society through readings, discussion and research. **TO: GR 8833 Weather and Society.** (3). Three hours lecture. Study of the role of weather in and on society through readings, discussion and research. Effective: Fall 2022

Technical Change	GR 8843	**Approved**	**FROM: GR 8843 Advanced Mesoscale Meteorology.** (3). (Prerequisite: MA 1713 or Consent of Instructor). Three hours seminar. Readings, writings and discussion of topics related to the mesoscale atmospheric environment with a strong focus on severe local storms. **TO: GR 8843 Advanced Mesoscale Meteorology.** (3). Three hours seminar. Readings, writings and discussion of topics related to the mesoscale atmospheric environment with a strong focus on severe local storms. Effective: Fall 2022
Technical Change	GR 8913	**Approved**	**FROM: GR 8913 Philosophy and Ethics in Geosciences.** (3). (Prerequisite: consent of instructor). Three hours seminar. Writing and discussion of topics related to the history and philosophy of science, professional and academic ethics, and epistemological issues related to the Geosciences. **TO: GR 8913 Philosophy and Ethics in Geosciences.** (3). Three hours seminar. Writing and discussion of topics related to the history and philosophy of science, professional and academic ethics, and epistemological issues related to the Geosciences. Effective: Fall 2022

All of the proposals were approved with the exception of the following:

Proposals**

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Peter L. Ryan
Dr. Peter L. Ryan
Executive Vice Provost for Academic Affairs

17th February 2022
Date