

Complimentary Minors

for students majoring in NRM

Numerous minors are within easy reach of NRM students because of the interdisciplinary nature of the NRM program. Earning a minor reflects your desire and commitment to broaden and strengthen your understanding of a discipline which complements the NRM program of study. Minors are recorded on the academic transcript along with the BS degree and major. Graduates are encouraged to highlight this accomplishment on their resumes and job applications, as well.

Minor requirements

Minors generally require anywhere between 16 – 21 units, eight of which must be earned in residence at NDSU. The minors listed below share with the NRM major many required courses which can be “double-counted.” With a little extra planning, you may only need to take an additional 3 to 4 courses to earn a minor. Refer to the attached page which lists minor requirements.

Declaring a minor

1. Review the minors listed on the attached page to determine those in which you are interested.
2. Obtain a Minor Form from your NRM Advisor or Student Services Coordinator. S/he can assist you with integrating the minor requirements into your academic planning and class scheduling.
3. If your selected minor requires departmental approval, obtain a signature from the respective department head/chair/program leader.
4. **Declare your minor at the *Bison Connection* or the *Office of Registration & Records*.** (Present your signed Minor Form if departmental approval is required.)
5. Keep your minor form in your NRM Student Handbook to track completion of the requirements.
6. Upon successful completion of the minor requirements, the minor will be recorded on your transcript.

Suggested minors (listed by NRM Emphasis):

Biotic Resource Sciences

- Biological Sciences (18 units: 12 required and 6 electives in dept-approved 300/400 level courses)
- Botany (19 units)
- Range Science (16 units)
- Zoology (18 units: 12 required and 6 electives in dept-approved 300/400 level courses)

Environmental Communication

- Journalism, Broadcasting and Mass Communication Technologies (21 units)
- Management Communications (21 units)
- Public Relations and Advertising (21 units)
- Speech Communication (21 units)

Natural Resource Economics

- Agribusiness/Agribusiness Track (17 units)
- Economics (18 units)

Physical/Earth Resources

- Environmental Geology (19/20 units)
- Geography (18 units selected in consultation with a Dept of Geosciences advisor)
- Geology (18 units selected in consultation with Dept. of Geosciences advisor)
- Soil Science (16 units)

Social Sciences

- Anthropology (18 units)
- Community Development (18 units which includes a 3 unit internship)
- Emergency Management (18 units)
- Political Science (21 units: 6 units selected in consultation with advisor)
- Sociology (18 units)

Complimentary Minors to the NRM Major

Agribusiness (17 credits)

Required Courses: 14 credits			
Dept	Nbr	Course Title	Crs
ECON	201	Principles of Microeconomics	3
AGEC	242	Intro to Agricultural Management	4
AGEC	244	Agricultural Marketing	3
AGEC	246	Intro to Agricultural Finance I	4
Electives: 3 credits (Any 300-400 level course in Agribusiness & Applied Economics)			

Anthropology (18 credits)

Required Courses: 6 credits			
Dept	Nbr	Course Title	Crs
ANTH	111	Intro to Anthropology	3
SOC	110	Intro to Sociology	3
Electives: 6 credits (choose 2 of the following courses)			
ANTH	204	Archeology & Prehistory	3
ANTH	205	Human Origins	3
ANTH	206	Peoples of the world	3
ANTH	208	Folklore & Culture	3
Additional Electives: 6 credits (ANTH courses at the 300-400 level)			

Biological Sciences (18 credits)

Required Courses: 12 credits			
Dept	Nbr	Course Title	Crs
BIOL	150	General Biology I	3
BIOL	150L	General Biology I Lab	1
BIOL	151	General Biology II	3
BIOL	151L	General Biology II Lab	1
BOT	372	Structure & Diversity of Plants & Fungi	4
Electives: 6 credits (Department approved 300-400 levels courses)			

Botany (19 credits)

Required Courses: 16 credits			
Dept	Nbr	Course Title	Crs
BIOL	150	General Biology I	3
BIOL	150L	General Biology I Lab	1
BIOL	151	General Biology II	3
BIOL	151L	General Biology II Lab	1
BOT	315	Genetics	3
BOT	315L	Genetics Lab	1
BOT	372	Structure & Diversity of Plants & Fungi	4
Electives: 3 credits (must be 300-400 level)			

Community Development (18 credits)

Required Courses: 6 credits			
Dept	Nbr	Course Title	Crs
SOC	405	Community Development	3
BUSN/EC	496	Internship	3
Economics Electives: choose 3 credits			
AGEC	220	World Agricultural Development	3
AGEC	355	Negotiation	3
AGEC	470	Agricultural Trade	2
AGEC/BI	374	Cooperatives	3
ECON	341	Intermediate Microeconomics	3
ECON	461	Economic Development	3
ECON	470	Public Finance	3
ECON	472	International Trade	3
ECON	481	Natural Resource Economics	3

Economics (18 credits)

Required Courses: 12-13 credits			
Dept	Nbr	Course Title	Crs
ECON	201	Principles of Microeconomics	3
ECON	202	Principles of Macroeconomics	3
ECON	341or	Intermediate Microeconomics or	3 or
BUSN	451	Managerial Economics	4
ECON	343	Intermediate Macroeconomics	3
Electives: 5-6 credits (2 courses required, one must be at the 300-400 level)			

Emergency Management (18 credits)

Required Core: 6 credits			
Dept	Nbr	Course Title	Crs
EMGT	101[201]	Emergencies, Disasters & Catastrophies	3
SOC	420	Sociology of Disaster	3
Disaster Stages: 12 credits			
Area 1: Preparedness			
EMGT	261[421]	Disaster Preparedness	3
Area 2: Mitigation			
EMGT	262[421]	Disaster Mitigation	3
Area 3: Response			
EMGT	263[431]	Disaster Response	3
Area 4: Recovery			
EMGT	264[483]	Disaster Recovery	3

Business Administration Electives: choose 3 credits			
ACCT	102	Fundamentals of Accounting	3
ACCT	200	Elements of Acct I	3
ACCT	201	Elements of Acct II	3
BUSN	340	Principles of Finance	3
BUSN	350	Foundations of Management	3
BUSN	360	Foundations of Marketing	3
BUSN	431	Business Law I	3
BUSN	441	Investment Analysis and Mgmt	3
BUSN	443	Mgmt of Financial Institutions	3
BUSN	453	Cultural Pluralism & Mgmt of Orgs	3
BUSN	463	Marketing Research	3
Social Science Electives: choose at least 3 credits			
COMM	370	Principles of Public Relations	3
COMM	472	Public Relations Campaigns	3
GEOL	300	Environmental Geology	3
H&CE	341	Leadership & Presentation Tech.	3
HNES	326	Recreation Programming	3
SOC	403	Sociology of the Great Plains	3
SOC	420	Sociology of Disaster	3
SOC	426	Sociology of Medicine	3
SOC	439	Social Change	3
SOC	465	Applied Demographics	3

Environmental Geology (19-20 credits)

Required Courses: 19-20 credits			
Dept	Nbr	Course Title	Crs
GEOL	105	Physical Geology	3
GEOL	105L	Physical Geology Lab	1
GEOL	300	Environmental Geology	3
GEOL	412	Geomorphology	3
GEOL	414	Hydrogeology	3
GEOL	428	Geochemistry	3
GEOL	413or	Glacial Geology or	3 or
GEOL	440	Quaternary Biology	4

Geography Minor (18 credits)

Select courses in consultation with Geosciences Dept.)

Geology Minor (18 credits)

Select courses in consultation with Geosciences Dept.)

Journalism, Broadcasting and Mass Communication Technologies (21 credits)

Required Courses: 12 credits			
Dept	Nbr	Course Title	Crs
COMM	112	Underst Media & Social Change	3
COMM	114	Human Communication	3
COMM	212	Interpersonal Comm	3
COMM	216	Intercultural Communication	3
Professional Specialization: 9 credits (Select 9 credits from the following courses)			
COMM	260	Prin of Internet Web-Based Design	3
COMM	313	Editorial Processes (Prereq. COMM 200)	3
COMM	345	Prin of Broadcast Production	3
COMM	362	Prin of Design for Print	3
COMM	421	History of Journalism	3
COMM	435	Popular Culture & Mass Media	3

Public Relations & Advertising (21 credits)

Required Courses: 12 credits			
Dept	Nbr	Course Title	Crs
COMM	112	Underst Media & Social Change	3
COMM	114	Human Communication	3
COMM	212	Interpersonal Comm	3
COMM	216	Intercultural Communication	3
Professional Specialization: 9 credits (Select 9 credits from the following courses; of which 3 credits MUST be either COMM 370 or 375)			
Dept	Nbr	Course Title	Crs
COMM	260	Principles of Internet Web-based Design	3
COMM	313	Editorial Processes (Prereq: COMM 200)	3
COMM	362	Principles of Design for Print	3
COMM	370	Principles of Public Relations	3
COMM	375	Principles and Practices of Advertising	3
COMM	435	Popular Culture & Mass Media	3
COMM	443	Mass Media & Public Opinion	3
COMM	472	Public Relations Campaigns	3
COMM	476	Advertising Campaign Practicum	3
COMM	485	Crisis Communication in Public Relations	3

Soil Science (16 credits)

Required Courses: 10 credits			
Dept	Nbr	Course Title	Crs
SOIL	210	Intro to Soil Science	3
SOIL	444	Soil Genesis/Survey	4
SOIL	351	Soil Ecology	3
Electives (choose 3 credits from the following):			
SOIL	322	Soil Fertility & Fertilizers	3
SOIL	410	Soils and Land Use	3
SOIL	465	Soil & Plant Analysis	3
Electives (choose 3 credits from the following):			
SOIL	433	Soil Physics	3
SOIL	447	Microclimatology	3
SOIL	480	Soils & Pollution	3

Management Communications (21 credits)

Required Courses: 12 credits			
Dept	Nbr	Course Title	Crs
COMM	112	Understanding Media & Social Change	3
COMM	114	Human Communication	3
COMM	212	Interpersonal Comm	3
COMM	216	Intercultural Communication	3
Professional Specialization: 9 credits (Select 9 credits from the following courses of which 3 must be COMM 383.)			
COMM	260	Principles of Internet Web-based Design	3
COMM	308	Business & Professional Speaking	3
COMM	383	Organizational Communication I	3
COMM	443	Mass Media & Public Opinion	3
COMM	482	Organizational Communication II	3
COMM	484	Global Organizational Communication	3
COMM	485	Crisis Communication in Public Relations	3
COMM	487	Organizational Power & Leadership	3

Speech Communication (21 credits)

Required Courses: 12 credits			
Dept	Nbr	Course Title	Crs
COMM	114	Human Communication	3
COMM	212	Interpersonal Comm	3
COMM	216	Intercultural Communication	3
Professional Specialization: 6 credits (Select 9 credits from the following courses; of which 3 credits MUST be either COMM 370 or 375)			
Dept	Nbr	Course Title	Crs
COMM	150	Forensic Practice	1 to 3
COMM	214	Persuasive Speaking	3
COMM	271	Listening/Nonverbal	3
COMM	312	Business/Professional Speaking	3
COMM	314	Argumentation/Debate	3
COMM	315	Small Group Communication	3
COMM	402	Contemporary Rhetoric	3
COMM	433	Legal Communication	3
COMM	451	Directing Forensics	2
COMM	480	Health Communication	3
COMM	483	Organizational Communication	3
Advanced Electives: 6 credits (Chosen from any 400 level course listed in Advanced Elective or Professional Emphasis Sections -- NOT COMM 496.)			
Dept	Nbr	Course Title	Crs
COMM	401	Survey of Rhetorical Theory	1 to 3
COMM	411	Communication Theory	3
COMM	412	Gender Communication	3
COMM	435	Popular Culture & Mass Comm	3
COMM	450	Issues in Communication	3

Political Science (21 credits)

Required Courses: 6 credits			
Dept	Nbr	Course Title	Crs
POLS	110	Intro to Political Science	3
or	115	American Government	3
POLS	220	International Politics	3
or	225	Comparative Politics	3
Electives: 3 courses at 400 level (areas of law, behavior, international relations or comparative politics)			
Additional Electives: 6 credits (selected in consultation with advisor)			

Range Science (16 credits)

Required Courses: 15 credits			
Dept	Nbr	Course Title	Crs
RNG	225	Natural Resources & Agroecosystems	3
RNG	336	Introduction to Range Management	3
RNG	450	Range Plants	3
RNG	452 or	Geog Info Systems in Range Survey or Rangeland Res. & Watershed Mgmt or Plant Ecology	3
RNG	453 or		
RNG	460		
RNG	456 or	Range Habitat Management or Grazing Ecology	3
RNG	458		
Electives: 1 credit minimum (max 1 credit for seminar)			

Sociology (18 credits)

Required Core: 6 credits			
Dept	Nbr	Course Title	Crs
ANTH	111	Intro to Anthropology	3
SOC	110	Intro to Sociology	3
Required Options: 6 credits (select any TWO courses)			
SOC	115	Social Problems	3
SOC	202	Minorities & Race Relations	3
SOC	214	Social Interaction	3
SOC	233	Sociology of Organizations and Work	3
Sociology Electives: 6 credits (Select any two SOC courses at the 300-400 level)			

Zoology (18 credits)

Required Courses: 12 credits			
Dept	Nbr	Course Title	Crs
BIOL	150	General Biology I	3
BIOL	150L	General Biology I Lab	1
BIOL	151	General Biology II	3
BIOL	151L	General Biology II Lab	1
ZOO	315	Genetics	3
ZOO	315	Genetics Lab	1
Electives: 6 credits (At least 3 credits in department approved 300-400 levels courses)			