DEPARTMENTS

- Biological Sciences
- Chemistry & Biochemistry
- Coatings & Polymeric Materials
- Geoscience
- Mathematics
- Physics
- Psychology
- Statistics
PRE-PROFESSIONAL HEALTH ADVISING

• CSM does primary advising for pre-med, pre-dent, pre-optometry, pre-chiropractic, pre-physician assistant

• Students in pre-med, pre-dent, etc. chose a discipline major (can be any discipline)
CSM MISSION

• Provide general education science and math courses to every undergraduate
• Provide support courses to undergraduate and graduate majors in CAFSNR, CoE, CHSE, and CHP
• Provide BS, MS and PhD programs in CSM disciplines
• Conduct research/scholarly activity
• Provide service/outreach to community
NDSU COLLEGES

- Agriculture, Food Systems, and Natural Resources
- Arts, Humanities and Social Sciences
- Business
- Engineering
- Health Professions
- Human Sciences and Education
- Science and Mathematics
GENERAL EDUCATION (LIBERAL EDUCATION)

• Complement to major that provides broad education across the sciences, arts, humanities and social sciences.
• Important basis for participation in democracy.
• Life enrichment outside of work.
• Provides skills that employers value!
# Learning Priorities of Executives and Hiring Managers* 2018

<table>
<thead>
<tr>
<th>Skill</th>
<th>Executives</th>
<th>Hiring Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective oral communication</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>Critical thinking/analytical reasoning</td>
<td>78%</td>
<td>84%</td>
</tr>
<tr>
<td>Ethical judgement and decision-making</td>
<td>77%</td>
<td>87%</td>
</tr>
<tr>
<td>Effective teamwork</td>
<td>77%</td>
<td>87%</td>
</tr>
<tr>
<td>Ability to work independently</td>
<td>77%</td>
<td>85%</td>
</tr>
<tr>
<td>Self-motivation, initiative, pro-active</td>
<td>76%</td>
<td>85%</td>
</tr>
<tr>
<td>Effective written communication</td>
<td>76%</td>
<td>78%</td>
</tr>
<tr>
<td>Ability to apply knowledge/skills to real world settings</td>
<td>76%</td>
<td>87%</td>
</tr>
</tbody>
</table>

*Percentage who characterized skill as very important.
## A Shifting Job Market

<table>
<thead>
<tr>
<th></th>
<th>20(^{th}) Century</th>
<th>21(^{st}) Century</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Jobs</td>
<td>1 - 2</td>
<td>10 - 15</td>
</tr>
<tr>
<td>Job Requirement</td>
<td>Mastery of One Field</td>
<td>Critical Thinking Across Disciplines</td>
</tr>
<tr>
<td>Teaching Model</td>
<td>Subject Matter Mastery</td>
<td>Integration of 21(^{st}) Century Skills Into Subject Matter Mastery</td>
</tr>
<tr>
<td>Assessment Model</td>
<td>“</td>
<td>“</td>
</tr>
</tbody>
</table>
COMMON (ERRONEOUS) VIEW OF A RESEARCH UNIVERSITY

- Teaching/Learning
- Service/Outreach
- Research
HOW IT WORKS IN CSM!

Teaching/Learning

Undergrad research

Research

Application of research

Service learning/ internships

Ideal intersection?

Service/Outreach
### EXPERIENCES VALUED BY EMPLOYERS*  2018

<table>
<thead>
<tr>
<th>Experience</th>
<th>Executives</th>
<th>Hiring Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internships/apprenticeships with a company organization</td>
<td>52 (93)</td>
<td>60 (94)</td>
</tr>
<tr>
<td>Project in community with diverse people</td>
<td>29 (72)</td>
<td>37 (83)</td>
</tr>
<tr>
<td>Multiple writing-intensive courses</td>
<td>29 (82)</td>
<td>23 (72)</td>
</tr>
<tr>
<td>Collaborative research project w/ peers</td>
<td>28 (81)</td>
<td>33 (81)</td>
</tr>
<tr>
<td>Advanced comprehensive senior project</td>
<td>28 (80)</td>
<td>28 (76)</td>
</tr>
<tr>
<td>Service-learning project with community organization</td>
<td>24 (71)</td>
<td>32 (78)</td>
</tr>
<tr>
<td>Study abroad program</td>
<td>18 (54)</td>
<td>16 (47)</td>
</tr>
</tbody>
</table>

*Percentage who were much more likely (much more likely or somewhat more likely to hire).
WHAT WILL HAPPEN TODAY

• Students will meet with an advisor
• They will build a schedule and walk away with a printout
• What to worry about? Not much.
• More than half of students change their majors.
ADVISING YOUR STUDENT

• Go to class!
• Get involved
• Go to class!!!
• Seek out and get to know your advisor(s)
• Go to class!!!!
• Do homework and other assignments
• Go to class!!!!!!!!!!
BIOL150, FALL 2012

• Student grade (average number of classes absent): A (0.8), B (1.8), C (2.7), D (4.4), F (8.5)

• Student grade (average number of quizzes not completed): A (0.1), B (0.2), C (0.4), D (1.0), F (2.3)

• Student grade (average number of HW assignments not completed): A (0), B (0.3), C (0.5), D (1.2), F (3.0).
Habits of Successful Students

Successful students:
- Ask questions or participate in class discussions often
- Complete readings and assignments before coming to class
- Often review notes after class
Habits of Successful Students

Successful students:

• Discuss course topics or concepts with a faculty member outside of class
• Talk with faculty members about career plans
• Spend an average of 17 hours per week preparing for classes
Student Learning Initiatives

- Active Learning
- Math Emporium
- Learning Assistants program
- Course-Based Undergraduate Research Experiences (CURE’s)
- ROPES: Research Opportunities for Engaging Students
THANK YOU

• Contact information:
  – Dean Scott.Wood@ndsu.edu

• Any Questions?